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Coping Resources and Cognitive Functioning as Predictors of Child Psychotherapy Outcome

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Dedication

This dissertation is dedicated with love and gratitude to my patient and loving husband, Kieran J. Purcell and to my darling son, K. Connor Sallee Purcell.

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Coping Resources and Cognitive Functioning as Predictors of Child Psychotherapy Outcome

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This dissertation explores the role of coping resources in predicting child psychotherapy outcome in a community mental health center. Coping resources are a set of physical, social, and psychological resources that help an individual to manage daily life demands and include characteristics of the functional intelligence needed for everyday living. Transactional models of stress have provided a framework for understanding the process between coping resources and stress/demands that take into account one's personal appraisal of internal resources and external demands. This perspective has been particularly useful in research investigating outcomes of stressful events in relation to children and in a variety of domains, such as medicine, divorce, and academia. Although no research available investigates coping resources as a predictor of child psychotherapy outcome, much research has focused on determining the efficacy

of child psychotherapy with little evidence of clear predictor variables. In an attempt to understand child psychotherapy outcome and coping resources, the role of the family, namely the parents, must be considered, as family factors are well established contributors to a child's functioning. To this date, research that has focused on treatment outcome variables has, to a large extent, been conducted using inpatient populations. Therefore, using a sample drawn from an outpatient population, such as a community mental health center, is warranted.

Due to these deficits in the child psychotherapy outcome literature, the primary focus of this proposed study is exploratory in nature. This study examines the role of three potential predictor variables (participant coping resources, participant's cognitive functioning, and parental coping resources) of child and adolescent psychotherapy outcome in a southwestern community mental health population. Outcome is measured behaviorally and is based on self report of the participant, parent report of participant behavior, and clinician report of participant behavior. Multiple regression analyses are employed using global scores from coping resources, behavioral outcome, and cognitive functioning instruments. Paired comparisons of pretest and posttest measures to address differences in means are computed. Results, implications, and limitations of the study as well as future directions are discussed.

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Chapter 1: Introduction

Coping resources are defined as a set of factors (internal and/or external) that aid the individual in meeting daily life demands in a resilient manner (Kurtz, 1994; Matheny, Aycock, Pugh, Curlette, & Cannella, 1986; McCarthy, Lambert, & Brack, 1997). Coping resources play an important role in understanding the ways in which an individual might approach or perceive stressful events. Hammer and Marting (1988) acknowledge the role coping resources play in mediating one's experience of stress by suggesting that coping resources enable the individual to experience fewer or less intense symptoms of stress and/or to recover faster from stressful events. Transactional models of stress have provided a framework for understanding the process between resources and demands as described by McCarthy, Seraphine, Matheny, and Curlette (2000), which takes into account one's personal appraisal of internal resources and external demands. Researchers have suggested that not only do one's coping resources influence how one perceives stressful life demands (Matheny, Aycock, Pugh, Curlette, & Cannella, 1986) but that how one perceives his or her coping resources can ultimately determine how successfully they handle life demands (McCarthy, Seraphine, Carlson, & Sallee, 2002). According to this perspective, it is from the imbalance of the perceived demands and perceived resources that stress results

(Lambert, McCarthy, Beard, and Carr, 2000; Lazarus, 1993; Matheny, Aycock, & McCarthy, 1993; Pilkington, White, & Matheny, 1997).

Although no research available has addressed coping resources in relation to child psychotherapy outcome, much research has already addressed the importance of coping resources in relation to children and outcomes in a variety of domains, including medicine, divorce, and academia (Compas, 1987; Cook & McBride, 1982; Kinsella, Ong, Murtaugh, Prior, & Sawyer, 1999; Kurtz, 1994; Matheny, Aycock, Pugh, Curlette, & Cannella, 1986; McCarthy, Seraphine, Carlson, & Sallee, 2002). Adequate levels of coping resources have been positively linked to outcomes of well-being and success for children by a number of researchers (Aldwin, Sutton, & Lachman, 1996; Buechi, Sensky, Sharpe, & Timberlake, 1998; Compas, 1987; Cook & McBride, 1982; Heikkilae, Heikkilae, & Eisemann, 1998; Kinsella et al., 1999; Kurtz, 1994; Matheny et al., 1986; McCarthy et al., 2002). Psychotherapy is often designed to aid the individual in managing not only severe stress but everyday stress as well. In this way, understanding the relationship between the process of psychotherapy and coping resources in managing stress becomes salient. Given the relationships that exist between coping resources and successful life outcomes, it seems intuitive that coping resources would be an important variable to consider when investigating psychotherapy outcome, but empirical research on this topic is scarce.

When children enter psychotherapy it is almost always due to difficulties the parent, either directly or indirectly, is experiencing in relation to the child or adolescent (for the sake of brevity, hereto after collectively referred to as "child" or "children"). Indirectly, for example, a child's teacher or principal may indicate to a parent that the school finds the child's behavior difficult to manage. Consequently, it is often the parent who is then perceived as holding a significant portion of the responsibility for remedying the situation, which may then be experienced as a direct stressor to the parent. When parents seek therapeutic services for their children, parents are often indirect, if not direct, recipients of the services as well. Parents usually seek to resolve some perceived stress that exists within the parent-child relationship, such as the example just mentioned. Consequently, clinicians usually address, at some level, the parenting capacities of the parent. These capacities, in turn, not only affect how the parent will cope with stressors that may exacerbate presenting issues but also how the child will cope. Several researchers have found that parental coping resources are significantly related to child outcomes in a number of domains (Hagoel, Van-Raalte, Kalekin Fishman, Shifroni, Epstein, & Sorokin, 1995; Kinsella et al., 1999; Levy-Shiff, Dimitrovsky, Shulman, & Har-Even, 1998). In addition, the contribution of family factors to the development of the child's coping resources as well as child outcomes has been empirically supported (Baumrind, 1991; Billings & Moos, 1982; Compas, 1987; Cook & McBride, 1982; Kazdin &

Wassell, 2000; Kinsella et al., 1999; Kurtz, 1994; Kurtz, 1996; Masten, Garmezy, Tellegen, Pellegrini, Larkin, & Larsen, 1988; McCarthy et al., 2002; Moos & Moos, 1981; Sorensen, 1993). Given the importance of parental coping resources as well as the importance of the development of the child's coping resources to child outcomes, it seems imperative that parental coping resources be considered when investigating the relationship between coping resources and child psychotherapy outcomes.

As previously noted, much research has been dedicated to child psychotherapy outcomes, yet little is known about the variables that may actually contribute to treatment outcome, as most studies have focused on determining the efficacy of child psychotherapy in general (Durlak & McGlinchey, 1999; Kazdin, 1999). Research attempting to identify predictors of child treatment outcome has provided little evidence as to what variables remain the strongest predictors (Andrade, Lambert, & Bickman, 2000; Casey & Berman, 1985; Gorin 1993; Kazdin & Wassell, 2000; Peterson & Bell-Dolan, 1995; Target & Fonagy, 1994; Weisz, Weiss, Alicke, & Klotz, 1987; Weisz, Weiss, Han, Granger, & Morton, 1995). Many researchers have investigated the roles of variables such as age, gender, dose effect (number of sessions), and socioeconomic status, with poor evidence of clear predictors (Andrade et al., 2000; Gorin, 1993; Kazdin & Wassell, 2000; Peterson & Bell-Dolan, 1995; Target & Fonagy, 1994; Weisz et al., 1995). The literature does not clearly identify which variables account for a

significant amount of variance in predicting treatment outcomes. In addition such research, to a large extent, has been conducted using inpatient samples as opposed to a more general clinical sample such as that of a community mental health center (Gorin, 1993). This imbalance has called into question the generalizability of such results to outpatient treatment. Because coping resources aid the individual in coping with everyday life, investigating the impact of such resources on an outpatient population is essential. For this reason, a community mental health center sample, as opposed to an inpatient sample, is important to study when identifying how coping resources are related to treatment outcomes.

While actual child psychotherapy outcome predictors appear unclear, many researchers acknowledge the importance of including a variable representative of developmental level, such as age or cognitive functioning, (Barkley, Gueveremont, Anastopoulos, & Fletcher, 1992; Casey & Berman, 1985; Durlak & McGlinchey, 1999; Kazdin, 1995; Kazdin & Crowley, 1997; Target & Fonagy, 1994) in order to provide a better understanding of differences in treatment outcomes. However, while its importance is often emphasized in relation to predicting treatment outcome, little research has actually included a comprehensive developmental variable in order to establish its relevance (Kazdin & Crowley, 1997). Some researchers who have addressed developmental issues through cognitive functioning have reported no significance in prediction of outcome (Barkley, Gueveremont, Anastopoulos, & Fletcher, 1992;Casey &

Berman, 1985; Kazdin & Crowley, 1997). In contrast, Target and Fonagy (1994) found that lower IQ was related to premature termination in psychoanalytic child psychotherapy. Perhaps in hopes of addressing these issues, many researchers have included age as a developmental variable. However, Durlak and McGlinchey (1999) have warned against the danger of using age to account for developmental level as children of the same age may differ significantly in their development. At this point, it appears that cognitive functioning in the form of IQ is an adequate, although certainly not comprehensive, variable capturing some of the relevance of development to outcome.

Given the lack of clear predictor variables, the abundance of inpatient samples, and the profusion of child psychotherapy efficacy studies, it is the intention of this study to add greater clarity to predicting child psychotherapy outcome in a general clinical population. More specifically, it is the purpose of this study to examine the predictive role of the following three variables in relation to child psychotherapy behavioral outcome in a community mental health population: (1) the child's coping resources, (2) the parent's coping resources, and (3) the child's level of cognitive functioning. The outcome of the child will be measured on a behavioral basis based on self-report of the child, parent report of the child's behavior, and clinician report of the child's behavior. Multiple regression analyses will be employed using global outcome scores from coping

resources, cognitive functioning, and behavioral outcomes measures described in the methods section.

Chapter 2: Review of the Literature

INTRODUCTION

People often enter psychotherapy in order to help manage or reduce perceived stress in their lives. Likewise, when parents seek therapeutic services for their child, it is often to aid the child, as well as the parents, in coping with either a specific stressful event or with a pattern of relational dynamics perceived as adding stress to the child's and/or family's daily functioning. It is usually the explicit treatment goal that the stress be reduced or eliminated. Being able to manage stress is necessary for one's survival, especially in modern times. Individuals find many ways to deal with the stress in their lives. While some find more successful means of handling pressure, others resort to more destructive methods. It is most often the negative patterns that bring individuals to seek psychotherapy. The same is true for children. What may seem like intentional and destructive behaviors are often ways of coping for the child. In the attempt to eliminate or reduce the perceived stress of the child and/or family, clinicians often seek to strengthen and/or develop resources that will aid the child (and/or family) in managing the stress. The implicit goal is to make these resources part of the internal framework of the individual and an integral part of the family relationship. This facilitates the client's ability to manage not only the presenting stress but future stressors, and, hopefully at the same time, minimizing

dependence on psychotherapy. In this way, the clinicians must attend to several issues when working with children.

In addition to these therapeutic demands, clinicians must also contend with the increasing demand for briefer psychotherapy, paper documentation of treatment efficacy, and other such pressures from managed care. Given the looming reality of these tasks, evaluating the efficacy of child psychotherapy has become a major focus of researchers and clinicians alike. While evaluating child psychotherapy outcome is not new, some researchers have begun to more closely address issues related to predicting outcome in order to facilitate the process of therapeutic change. Identifying predictors, then, should theoretically aid the clinician in distinguishing what areas may be most important to consider when quality psychotherapy, limited by brevity, is a must.

In the first section of this chapter, a transactional model of stress will be presented as a framework for understanding the contributions of coping resources to managing stress. A context for understanding the significance and role of coping resources as part of a framework for investigating child psychotherapy outcome will then be introduced. The next section will address the family as an important backdrop to understanding child psychotherapy outcome as well as the relationship between parental and child coping resources. The third and last section will provide a review of the child psychotherapy outcome literature.

Progress and deficits in relation to determining significant predictors of child psychotherapy outcome will be presented.

TRANSACTIONAL MODELS OF STRESS

When parents seek therapeutic services for their child, they often present either a specific stressful event that has occurred or a pattern of relational dynamics perceived as stressful to the child, the school/teacher, and/or the parent or family. Clients often enter psychotherapy in order to eliminate this perceived stress and/or find a means of coping with it. Community mental health centers often seek to facilitate this process for their clients. In fact, such clinicians often attempt to empower their clients by developing effective resources for coping with stress. However, little is known about the role coping resources play in child psychotherapy outcome. Although traditionally coping resources have been recognized as relatively stable variables, it is, in fact, unknown whether coping resources themselves change (i.e., increase) during psychotherapy. This begs the question of whether or not coping resources play a role in the process of therapeutic change and outcomes of child psychotherapy.

Kurtz (1994) defines coping resources as internal and/or external mechanisms, primarily psychosocial factors that influence resilience. Coping resources have also been defined by others as a set of physical, social, and psychological resources that help an individual to manage daily demands and include characteristics of the functional intelligence needed for everyday living

(Matheny et al., 1986; McCarthy, Lambert, & Brack, 1997). Coping resources play an important role in understanding the ways in which an individual might approach or perceive stressful events. Hammer and Marting (1988) acknowledge this mediating role by emphasizing that one's coping resources affect one's speed of recovery from stress. Transactional models of stress have provided a framework for understanding the process between resources and demands as described by McCarthy, Seraphine, Matheny, and Curlette (2000), which takes into account one's personal appraisal of internal resources and external demands. The authors point out that past stress models have placed far greater weight on understanding environmental stressors or physiological adjustments used to manage stress rather than focusing on individual reactions and/or resources. Once an individual has interpreted the significance of the (potentially) stressful situation, a stress response then begins, and it is at this point that the authors contend that one's coping resources are then tapped in an effort to manage the perceived stress. Researchers have suggested that not only do one's coping resources influence how one perceives stress in his or her life (Matheny, Aycock, Pugh, Curlette, & Cannella, 1986) but also that how one perceives his or her coping resources influences how successfully he or she handles such stress (McCarthy, Seraphine, Carlson, & Sallee, 2002). In fact, Lambert, McCarthy, Beard, and Carr (2000) state that coping has been linked to prevention in that certain resources, such as confidence, acceptance, and self-directedness, are more

likely to lead to less stressful interpretations of events that are often considered to be stressful. It is the imbalance, then, of perceived demands to perceived resources that produces stress (Lambert, McCarthy, Beard, and Carr, 2000; Lazarus, 1993; Matheny, Aycock, & McCarthy, 1993; Pilkington, White, & Matheny, 1997).

Researchers have applied this transactional model of stress to understanding the function of coping resources in children. Cook and McBride (1982) researched how effective crisis management can build strengths and adaptive resources in children of divorce. The authors suggest children fare better in situations of divorce when they already possess the necessary strengths and coping resources needed to deal with divorce. They also suggested that most children facing such a crisis do not have this necessary set of effective resources. Furthermore, Compas (1987) argues, "the resources available to cope with stress and the manner in which individuals actually cope may be important factors influencing patterns of positive growth and development as opposed to the onset of a host of psychological and somatic problems" (p. 213). For these reasons, coping resources have been included in this study as a potentially important variable in the prediction of treatment outcome for children.

Many areas of research have found coping resources to be significant predictors of outcome for both children and adult populations. For instance, in developmental domains, parental coping resources have been found to be

predictive of infant development as well as maternal adjustment (Levy-Shiff et al., 1998). In addition, coping resources of mothers combined with biomedical risks were found to be the strongest predictor of pregnancy and delivery outcomes in comparison to biomedical risks alone (Hagoel et al., 1995). Others have investigated coping resources in the medical domain. Kinsella, Ong, Murtaugh, Prior and Sawyer (1999) found parental coping resources to be significant in predicting behavioral outcomes of children with traumatic brain injuries. Wade, Borawski, Taylor, Drotar, Yeates, and Stacin (2001) found similar results with regard to family outcomes of children with traumatic brain injuries or orthopedic injuries. Buechi, Sensky, Sharpe, and Timberlake (1998) found coping resources to be positively linked to specific outcomes among patients suffering from rheumatoid arthritis, while Webb and Beckstead (2002) found a similar relationship between coping resources and blood-pressure. In the psychological domain, Aldwin, Sutton, and Lachman (1996) noted that coping resources predicted positive or negative outcomes for adults in stressful situations that were also linked to levels of depression. In addition, coping resources have been linked to psychological adjustment of adults diagnosed with bipolar disorder (Pollack, Harvin, & Cramer, 2000) and adults receiving treatment for substance abuse dependence (Kominars, 1997; Norlander, Bergman & Archer, 2002). Vocational outcomes for adults have also been predicted using coping resources (Heikkilae et

al., 1998). What is most striking about the coping resources literature is the paucity of research investigating coping resources of children themselves.

Kurtz (1994) has acknowledged the increasing need to examine stress and coping theory as an explanatory framework for children's postdivorce outcome and found that children whose coping resources, especially family support, were lower had poorer postdivorce adjustment than those children who possessed higher or better coping resources. Coping resources theory has also begun to make its way into the domain of school-related outcomes. Skinner and Wellborn (1997) have proposed that child coping resources be considered when exploring child and adolescent functioning in the academic realm. McCarthy et al. (2002) found coping resources to be significant mediators of the relationship of family functioning and the academic outcomes such as homework performance and self-reported grades for middle-school students. The authors also suggest that middle schoolers who believe they have ample coping resources and positive relationships with high-functioning peers are most likely to have successful school performance. Matheny et al. (1986) propose that coping resources are better predictors of academic outcomes than that construct which much of research has so zealously focused on—self-esteem. In addition, the authors describe coping resources as most important to successful adjustment. Matheny et al. further suggest that this may hold true due to the fact that coping resources are more specific in capturing the physical, social, and psychological aspects

necessary for meeting the demands of daily living. McCarthy et al. (2002) point out that while coping resources appear to be most important for a younger population, such research has focused almost exclusively on adult coping resources.

Therefore, it would seem important in our attempt to understand and better support children and adolescents, that coping resources be a focus when investigating predictor variables for treatment outcome, especially in an outpatient population. Kinsella et al. (1999), in their study on children with traumatic brain injury, found that counseling aimed at enhancing coping styles (an important part of coping resources) may also promote more favorable outcomes. In addition, Compas (1987) points out that coping resources are important in the efforts of a child or adolescent to manage and/or overcome stressful situations. Given that the importance of coping resources in outcome has been empirically supported in a variety of well established areas of research, it is imperative that we transfer this knowledge to a community mental health population. Mental health services are in high demand, and it is an area in constant need of knowing how to best deliver psychotherapy services.

THE RELATIONSHIP BETWEEN FAMILY AND CHILD OUTCOMES

In addition to better understanding coping resources and its significance in predicting treatment outcome in a child outpatient population, it is imperative that research include parental coping resources. Kazdin & Wassell (2000) state that

parent and child dynamics are recognized as “reciprocal, bi-directional, and interdependent” (p.414). In their study investigating child psychotherapy outcomes, the authors found child, parent, and family functioning to be significantly related. The impact of the family on child welfare is considered by many to be a primary and integral experience in child development (Baumrind, 1991; Masten, Garmezy, Tellegen, Pellegrini, Larkin, & Larsen, 1988; Moos & Moos, 1981).

Many researchers have underscored the importance of family by showing the link of family environment to academic outcomes for children (Brown et al., 1993; Dornbusch, Ritter, Mont-Reynaud & Chen, 1990; Masten et al., 1988; McCarthy, et al., 2002; Parikh, Shah, & Patel, 1986). These authors suggest a positive family environment nurtures specific capacities or resources that serve to promote successful outcomes in relation to the demands of childhood. In fact, many researchers argue that families are the initial means by which children and adolescents are introduced to coping strategies and are a significant factor in the development of coping resources (Billings & Moos, 1982; Kurtz, 1996; Sorensen, 1993). In their research on children and divorce, Cook and McBride (1982) found that children’s reactions to crises are dependent upon the emotional availability of important people such as their parents. That is, each child’s adjustment to divorce will vary according to the child’s available support system, an important part of coping resources. In addition, Gorin (1993) found parental behavior change to be

strongly predictive of child psychotherapy outcome in a study using a community mental health population. Therefore, it would seem negligent to ignore the status of such resources in the system of child, parent, and therapeutic services.

Other researchers also echo not only the importance of coping resources in predicting outcome but also the necessary attention to the role parents' coping resources play. As previously noted, Kinsella et al. (1999) found parental coping resources to be a significant predictor of behavioral outcomes in children with traumatic brain injuries. The authors suggest that the family environment will not only impact the child's outcome but also will be affected itself by the child's crisis. Hence, the ability of both the child and the family system to cope with the change (stress) may contribute to the behavioral outcome of the child. Kinsella et al. found that even at a one-year follow-up, parental coping resources significantly predicted behavioral outcomes of the children. Similarly, Kurtz (1994) found that in postdivorce adjustment "the nature of children's vulnerability varies according to individual, parental, and contextual factors" (p. 556). The author further points out that the family is an integral and important component of a child's social network. Results of Kurtz's study highlight this point by indicating that children whose family support resources were low had poor adjustment compared to those whose family support was higher. Compas (1987) further affirms that the importance of a child's dependency on a parental system for survival emphasizes the need to include the family (the relationship between

the child and the environment) in understanding child coping resources. Given such evidence, it would seem negligent to exclude the role the family or parent plays in the outcome of a child or adolescent in an outpatient psychotherapy setting. Although an extraordinary amount of research has been conducted on child treatment outcomes, surprisingly, little has adequately addressed the role of the parent(s) in their child's treatment, and none has addressed parental coping resources as a possible predictor.

CHILD PSYCHOTHERAPY OUTCOME RESEARCH

In recent and past years much research has focused on the outcome of child psychotherapy (Durlak & McGlinchey, 1999; Kazdin, 1999). In fact, Durlak and McGlinchey (1999) quoted that over 2400 outcome studies in child psychotherapy alone exist. Interestingly, most of this research has focused on determining the efficacy of child psychotherapy, including individual, group, and family therapies, (Durlak & McGlinchey, 1999; Kazdin, 1999) while little has focused on what variables may actually contribute to outcome. As Durlak & McGlinchey (1999), Kazdin (1997, 1999), and Weisz, Weiss, Han, Granger, and Morton (1995) have clearly pointed out in more recent meta-analyses, child psychotherapy has been proven unquestionably effective, leaving little need for concern in regard to its efficacy. Similarly, past meta-analyses (Casey & Berman, 1985; Weisz, Weiss, Alicke, & Klotz, 1987) indicated child psychotherapy in general to be quite beneficial with little evidence to support that a particular

therapeutic modality is most effective. This suggests that modality is not the most salient variable in child psychotherapy outcome but rather other variables which may be part of the psychotherapy process itself.

Research investigating predictor variables of child psychotherapy outcome has been mixed in its results (Andrade et al., 2000; Gorin, 1993; Kazdin & Wassell, 2000; Peterson & Bell-Dolan, 1995; Target & Fonagy, 1994; Weisz et al., 1995). For instance, in regard to dose effect, Andrade, Lambert, and Bickman (2000), investigated outcome predictors using a community mental health center population and found the number of sessions attended to have no predictive value. In addition, meta-analyses have yielded similar dose effect results (Casey & Berman, 1985; Weisz et al., 1987). Lambert and Bickman have suggested that it is perhaps the appeal of using this variable as a means for evaluating psychotherapy effectiveness by such institutions as managed care rather than its actual predictive value that has generated the focus on its inclusion. However, others have contended just the opposite in their investigations. Gorin (1993) found dose effect to be one of the strongest predictors of global change in psychotherapy outcome for children. Likewise, Heinicke and Ramsey-Klee (1986) and Target and Fonagy (1994) also found that dose effect played a significant role in determining child psychotherapy outcome, with those participants attending a greater number of sessions showing greater improvement in treatment outcome. In summary, then, it is difficult to surmise the value of this variable.

Other research examining predictors of child psychotherapy outcome have investigated variables such as gender and age with mixed results. Kazdin and Crowley (1997) conducted a study on an outpatient mental health clinic population. The authors found that the age of the child as well as gender were important predictors in determining cognitive-behaviorally based treatment outcome for children with conduct problems, suggesting that older children show greater improvement in psychotherapy than do younger children, as do girls compared to boys. Likewise, Target and Fonagy (1994) also examined how age is related to psychoanalytic treatment outcome in children. Their results suggest age is significant in that younger clients showed significantly greater improvement than older clients (i.e., adolescents). In addition, they found no significance in relation to gender, socioeconomic status, diagnosis, dose effect, or marital status of the parents as far as age was concerned. In contrast, Kazdin and Wassell (2000) found age and gender to have no significant predictive or interactive values in relation to child psychotherapy outcome. Casey and Berman (1985) found similar results in their meta-analysis regarding age. In addition to these studies, several other researchers have investigated the importance of such variables as age, gender, dose effect, and socio-economic status each with differing reports in the level of significance of the predictor variables (Barkley et al., 1992; Barrett et al., 1996; Kazdin, 1995).

In an attempt to control for diagnosis, Kazdin and Crowley (1997) investigated the role the number of symptoms played in treatment outcome for children with conduct problems. The authors concluded it was not the diagnosis itself that predicted outcome but rather the actual number of symptoms across various diagnoses that proved to be significant in predicting outcome. Children with a greater number of symptoms across a range of disorders showed poorer outcomes post-treatment. This suggests that children with a greater number of symptoms spanning a greater number of disorders reflect a greater severity of problems. Similarly, Casey and Berman (1985) in their meta-analysis of seventy-five psychotherapy outcome studies with children found that diagnosis did not significantly contribute to outcome. What seems to be most importantly gleaned from this information is that development and the type of the presenting problem(s) are significant in understanding outcome. Both Kazdin and Crowley's and Casey and Berman's studies were based on outpatient samples, which brings to light another important issue in child psychotherapy outcome research. Gorin (1993) points out that the outpatient population of a community mental health setting is rarely the focus of outcome studies. Rather, many studies are centered on inpatient populations, which may yield results less representative of a more general part of the child and adolescent psychotherapy population. The lack of a more generalizable population sample in the literature argues for the inclusion of a more representative outpatient sample.

Although many researchers emphasize the importance of cognitive functioning in relation to identifying predictor variables for treatment outcome, little, if any, research has actually included such a measure to establish its relevance (Kazdin & Crowley, 1997). Many researchers have acknowledged the importance of including a variable representative of developmental level, such as IQ, (Barkley, Gueveremont, Anastopoulos, & Fletcher, 1992; Barrett, Dadds, & Rapee, 1996; Casey & Berman, 1985; Durlak & McGlinchey, 1999; Kazdin, 1995; Kazdin & Crowley, 1997; Target & Fonagy, 1994) as it is thought to be potentially important in understanding differences in treatment outcomes. Interestingly, many researchers have chosen to address this deficit by including age as a representative variable of developmental level. However, Durlak and McGlinchey (1999) have cautioned that "age is a poor proxy variable for developmental level because children of the same age can differ substantially in their social-cognitive abilities" (p. 536). Such a statement seems to warrant a better attempt to account for developmental level. Therefore, it may be cautiously stated that developmental level is partially captured using a measure of cognitive functioning.

SUMMARY

Understanding the many factors that contribute to child psychotherapy outcome is inherent to meeting the ever-increasing demand for high-quality, brief psychotherapy services in a managed care world. In addition, effective research

must continue to investigate contributions to psychotherapy outcome if they are to be useful in furthering the understanding of the dynamics of such a process. In an attempt to gain greater clarity of the predictors contributing to outcome, this exploratory study investigates the predictive role of the following three variables in relation to child psychotherapy outcome in a community mental health population: (1) the child's coping resources, (2) the parent's coping resources, and (3) the child's level of cognitive functioning. Outcome is behaviorally based and is measured by self-report of the child, parent report of the child's behavior, and clinician report of the child's behavior. Multiple regression analyses were employed using global outcome scores from coping resources, cognitive functioning, and behavioral outcomes measures described in the methods section.

Chapter 3: Methodology

STATEMENT OF PURPOSE

The primary focus of this proposed study is exploratory in nature. It is the general purpose of this study to examine the role of coping resources in relation to child and adolescent psychotherapy outcome in a community mental health population. Coping resources have been positively linked to outcomes of well-being and success by a number of researchers (Aldwin et al., 1996; Buechi et al., 1998; Compas, 1987; Cook & McBride, 1982; Heikkilae et al., 1998; Kinsella et al., 1999; Kurtz, 1994; Matheny et al., 1986; McCarthy et al., 2002), not only for adults but for children as well. Transactional models of stress have provided a framework for understanding the process between coping resources and stress/demands, which take into account one's personal appraisal of internal resources and external demands (Lazarus, 1993; McCarthy, Seraphine, Matheny, & Curlette, 2000; Pilkington, White, & Matheny, 1997). The role of coping resources in outcome measurement has been well established in a variety of domains, including medical, psychological adjustment (divorce), vocational, and academic. Much of this research has already addressed the importance of coping resources not only in relation to a child's level of functioning but also in terms of predicting related (i.e., medical or psychological) outcomes (Compas, 1987; Cook & McBride, 1982; Kinsella et al., 1999; Kurtz, 1994; McCarthy et al., 2002; Matheny et al., 1986). Although no research available addresses coping resources

as a predictor of child psychotherapy outcome, much research has focused on determining the efficacy of child psychotherapy with little evidence of clear predictor variables (Andrade et al., 2000; Casey & Berman, 1985; Durlak & McGlinchey, 1999; Gorin 1993; Kazdin & Wassell, 2000; Kazdin, 1999; Peterson & Bell-Dolan, 1995;Target & Fonagy, 1994; Weisz et al, 1987; Weisz et al., 1995). It is therefore considered important to identify the contribution of this variable to the outcome of child psychotherapy.

In an attempt to understand child psychotherapy outcome and coping resources, the role of the family, namely the parents, must be considered. Several researchers have found that the impact of parental coping resources is significantly related to the behavioral outcome of the child (Hagoel et al., 1995; Kinsella et al., 1999; Levy-Shiff et al., 1998). The importance of family has been underscored by several researchers in relation to coping resource development as well as outcome (Baumrind, 1991; Billings & Moos, 1982; Compas, 1987; Cook & McBride, 1982; Kazdin & Wassell, 2000; Kinsella et al., 1999; Kurtz, 1994; Kurtz, 1996; Masten et al., 1988; McCarthy et al., 2002; Moos & Moos, 1981; Sorensen, 1993). For these reasons, it appeared imperative to include a measure of parental coping resources in order to identify such a variable's contribution.

Many researchers have acknowledged the importance of including a variable representative of developmental level (Barkley et al., 1992; Barrett et al., 1996; Casey & Berman, 1985; Durlak & McGlinchey, 1999; Kazdin, 1995;

Kazdin & Crowley, 1997; Target & Fonagy, 1994) as this is thought to be potentially important in understanding differences in treatment outcomes. Although its importance is often emphasized in relation to identifying predictor variables for treatment outcome, little research has actually included such a variable to establish its relevance (Kazdin & Crowley, 1997). Researchers who have addressed its importance have found mixed results (Barkley, Gueveremont, Anastopoulos, & Fletcher, 1992; Casey & Berman, 1985; Kazdin & Crowley, 1997; Target & Fonagy, 1994). Results have suggested cognitive functioning has no relation to outcome prediction in child psychotherapy (Barkley, Gueveremont, Anastopoulos, & Fletcher, 1992; Casey & Berman, 1985; Kazdin & Crowley, 1997) while also suggesting that it might be related to premature termination (Target & Fonagy, 1994). Therefore, this study included cognitive functioning in order to explore its ability to contribute to treatment outcome as well as address limited developmental issues. In addition, the generalizability of the sample to a larger population, such as an outpatient community mental health center population, is important when considering the implications of findings. To this date, research that has focused on treatment outcome variables has, to a large extent, been conducted using inpatient populations (Gorin, 1993).

RESEARCH STUDY GOALS AND HYPOTHESES.

In the proposed study, participants and parents from a local community mental health center completed instruments measuring the level of coping

resources as well as behavioral outcomes. A measure of the participant's cognitive functioning was also included. In addition, the participants' clinicians completed an instrument measuring behavioral outcome. The original goal of the study was to determine whether or not coping resources and cognitive functioning predict child psychotherapy outcome as measured by self-report, parent report, and clinician report. An exploratory step of paired comparisons of pretest and posttest measures was included after examining the data in relation to the study's hypotheses to capture differences in means suggesting change in reported coping resources and behavioral symptoms. Following are the three original hypotheses of the study.

Research Study Hypothesis #1: Child Self-Reported Outcome.

It was expected that coping resources of both the parent and the child as well as the child's level of cognitive functioning would account for a significant amount of unique variance in the prediction of treatment outcome as measured by child self-report of behavior.

Research Study Hypothesis #2: Parent Reported Outcome.

It was expected that coping resources of both the parent and the child as well as the child's level of cognitive functioning would account for a significant amount of unique variance in the prediction of treatment outcome as measured by parent report of child behavior.

Research Study Hypothesis #3: Clinician Reported Outcome.

It was expected that coping resources of both the parent and the child as well as the child's level of cognitive functioning would account for a significant amount of unique variance in the prediction of treatment outcome as measured by clinician report of child behavior.

PARTICIPANTS.

Participants included 54 child and adolescent psychotherapy clients and their legal guardians from a southwestern metropolitan community mental health agency who consented to be in the study. Of those original 54 participants, 23 did not complete any measures (hereafter referred to as Group 1-Consent Only), 14 completed pretest measures only (hereafter referred to as Group 2-Consent + Pretest), and approximately 17 completed enough measures to be included in the study (hereafter referred to as Group 3-Group Used for Analysis). Group 1 consists of those participants who left with the return envelopes (please see Procedures section for further detail) but never returned any completed measures. Group 2 consists of those participants who returned the initial packet of measures but did not return the second (posttest) packet of measures. Group 3 consists of those participants who completed both pretest and posttest packets with all measures, excluding the WASI. Mean age for participants (all Groups) was 11.43 (*SD* = 2.439, range = 8 to 17), while the mean age for male participants was 11.27 years of age, and mean age for female participants was 12 years of age. The

socio-economic status range was less than $8980 to greater than $65,000 for annual income per subject's family. The number of sessions attended ranged from seven to twelve in a three-month period. Table 1 represents the descriptive information for gender and ethnicity for all Groups. Approximately 65% of the participants were males and 35% were females. Approximately 48% of participants were white, 24% Latino/a, 20% African-American, and 7% Biracial by self-report. Inclusion criteria for participants: participants were required to be 8 years of age through 18 years of age and be living with a legal and permanent guardian (i.e., not foster parents). Diagnostic information was not included in this study due to two reasons. The first reason was that the agency held no particular philosophy regarding use of the DSM-IV and clinicians varied greatly in their training on the use of diagnoses both by level of training as well as by field (i.e., social work, marriage and family, and psychology). The second reason was based on the literature review, which suggests that diagnoses are less useful in terms of understanding child psychotherapy due to the difficulty mentioned in the first reason (Kazdin & Crowley, 1997). All participants were fluent in English. Participants and their parents both completed the pretest and posttest study instruments in order to be included in the final analysis. To join the study, all participants were asked to complete the first set of measures before beginning psychotherapy. The range for number of sessions attended was seven sessions to ten sessions. Data were collected from September 2002 through September 2003.

Table 1. Descriptive Information for Ethnicity and Gender.

GROUP	GENDER	ETHNICITY White	Latino/a	African-American	Other	TOTALS
1. Consent Only	Male	3	6	3	1	13
	Female	5	1	4		10
	Total	8	7	7	1	23
	%	14.8%	13.0%	13.0%	1.9%	42.6%
2. Consent + Pre Tests	Male	4	1	1		6
	Female	4		1	3	8
	Total	8	1	2	3	14
	%	14.8%	1.9%	3.7%	5.6%	25.9%
3. Group Used for Analysis	Male	9	5	2		16
	Female	1				1
	Total	10	5	2		17
	%	18.5%	9.3%	3.7%		31.5%
TOTALS		26	13	11	4	54
		48.1%	24.1%	20.4%	7.4%	100.0%

According to the agency from which the sample was drawn, this study was representative of the agency's population in terms of both gender and ethnicity. Statistics from the agency's 2001 data were as follows: 60% male, 40% female; 50% White, 30% Latino/a, 14% Black, and 7% Other. Recent and past research has indicated a similar pattern of more boys than girls in psychotherapy (Casey & Berman, 1985; Gorin, 1993; Kazdin & Wassell, 1999; Weisz et al., 1995). In terms of ethnicity, research has varied in that few researchers have reported greater numbers in terms of ethnic diversity (Kazdin, 1995) while others have reported majority white participants (Barkely et al., 1992; Durlak & McGlinchey,

1999; Gorin, 1993; Kazdin & Crowley, 1997), and others have not reported ethnicity statistics at all (Barrett et al., 1996; Target & Fonagy, 1994).

PROCEDURE.

All participants were recruited upon arriving at the agency during their intake screening session and prior to their initial session of psychotherapy. The original agreement between the agency and the researcher was such that all new clients would receive the study information at their intake screening. Just before the study began, the agency renegotiated this agreement so that a member of the research team would sit in the lobby of the agency, waiting for the clients scheduled for an intake session. In addition, while the study was under way, the agency restructured their intake process. Initially, clients were scheduled for intake sessions between 9:00 a.m. and 12:00 p.m. on Mondays. The restructuring then allowed each of the eight intake clinicians to schedule intake sessions according to their own schedules. Because of this change in the intake process, the number of potential participants who might have been contacted to participate in the study was significantly reduced. Shortly after this change, the agency made an additional change to the intake process. The original process placed clients on a waiting list until a therapist was available. Clients typically received three months or twelve sessions of individual therapy with a strong family component. This was the original agreement on which the study was based. However, the intake process was restructured to eliminate waiting lists and the traditional

therapy services. The new intake process involved an assessment of the client and then a placement in one of three “groups”. The intake clinician determined which of the following was suitable for the client: (1) the typical three month/twelve session format in which the clients were then assigned a clinician, sometimes with a brief waiting period; (2) a brief standardized (manualized) four session treatment with no waiting period; and (3) group therapy according to the needs and age of the child, sometimes with a brief waiting period. These changes significantly compromised the ability of the researcher to maximize a sizable sample as those clients placed in the latter two groups would not be following the original treatment plan on which the study was based.

All participants and their parents were provided an informational flier, or debriefing form, (Appendix A) that included a statement of purpose for the study. The flier asked clients if they wished to participate. If clients wished to participate in the study, they were asked to sign the flier, and a member of the research staff obtained consent to participate. If clients did not wish to participate, they did not need to do anything, and they were not further contacted. Participation was completely voluntary and participants were reminded that they had the right to terminate at any time with no effect to their receiving services. Group 3 participants were compensated with gift certificates to a national music and electronics store chain. Group 3 parents/guardians were compensated with gift certificates to a local grocery store chain.

All participants' parents were provided a consent form (Appendix B) explaining the voluntary nature of the study. Active written consent from the participant's parent(s) was obtained. All participants were given the opportunity to assent their participation as well (Appendix C). A member of the research staff obtained consent after the client agreed to participate in the study. If a participant wished to assent his or her participation, the child was told the form is a signed agreement to be in the study and that his or her parents have agreed to this. This occurred in the presence of the parent/guardian. The forms explained confidentiality of the information as well as described which information will come from the child's records. A brief description was also given which includes the general purpose of the study instruments. All participants were reminded that participation is completely voluntary and that they could end their participation at any time upon their request. Guidelines for human research provided by the American Psychological Association and the University of Texas Institutional Review Board for the Protection of Human Subjects were followed. The consent form, debriefing form, and instruments were approved by the Departmental Review Committee and the University Institutional Review Board.

After signing the consent form and reading the debriefing form, all participants were asked to complete two self-report instruments measuring coping resources and personality/behavior, which combined take about 1 hour to complete. The accompanying parent was asked to complete a self report

instrument measuring the parent's level of coping resources and an instrument assessing behaviors of the child, which combined take about 30 minutes to complete. All parents and/or participants were offered the option of having the instruments read to them. All participants and their parents were offered the option of completing a measure of cognitive functioning (of the participant) but were not required to do so to be included in the study. Because one participant was receiving combined therapeutic and assessment services, the research team member obtained informed consent (via the consent form) to have their current cognitive assessment scores included in the study. All participants were sent home with relevant measures with a self-addressed stamped envelope to return the completed measures to the agency. All participants who had not returned their measures prior to their first psychotherapy session were reminded by phone to send in the envelope with the completed measures. All participants' clinicians completed the Child and Adolescent Functional Assessment Scale (CAFAS), which takes about 10 minutes to complete, according to agency policy. The following information was obtained from allparticipants' records: (1) age, gender, ethnicity, and socioeconomic information, (2) number of sessions attended, and (3) full scale IQ score if necessary. Parents were offered the option of requesting that the IQ score not be used in the study, which did not affect ability to participate. Full Scale IQ scores from the Wechsler Abbreviated Scale of Intelligence (WASI) or the Wechsler Intelligence Scale for Children (WISC-

III) were used. All participants attended their psychotherapy sessions as normal. Group 3 participants received individual psychotherapy with a family component that included parent education/guidance. The agency from which the sample was drawn strongly believes in involving the parent in the therapy of the child. Each participant used in the study received an individual therapy approach determined by his or her clinician. The agency's philosophy is to use evidenced-based therapies involving play, behavioral and cognitive-behavioral components in addition to sharing techniques and information with parents/guardians. In addition, it is important to note that the training level of clinicians varied significantly. Because the agency from which the sample was drawn is a training agency, clinicians varied in their levels of experience and field of training. Clinicians included practicum, intern, and post-doctoral trainees from the social work, marriage and family, and psychology fields. At termination, the participant was again administered the BASC SRP-C or A. In addition, the parent was asked to complete the appropriate BASC form. The clinician completed the CAFAS upon termination.

INSTRUMENTS.

Coping Resources Inventory Scales for Educational Enhancement (CRISEE).

See Appendix D. The Coping Resources Inventory Scales for Educational Enhancement (Curlette, Matheny, Aycock, Pugh, Taylor, & Cannella, 1998) is one of the few instruments designed to measure coping resources of children. It is

a 99 true/false item self-report instrument designed for use with children and adolescents who possess at least a second-grade reading level and takes about 50 minutes to complete. The CRISEE is designed to measure the child's perceived stressors, stress-coping resources, and stress symptoms. The instrument yields one overall coping score, five coping resource scores, one overall stressor score, four stressor scores, and one tracking item score used as a validity check. Validity checks for the purposes of this study did not yield any concerns. The CRISEE has six resource scales: Social Confidence, Behavior Control, Peer Acceptance, Academic Confidence, Family Support, and an experimental scale of Responsibility. For the purposes of this study the overall coping score (Coping Resource Effectiveness score) was used. The authors report the Coping Resource Effectiveness scale measures the overall level of coping resources and, therefore, the overall coping effectiveness (ability to manage stress) available to the child. High scores indicate greater amounts of resources and considered desirable.

Curlette, Matheny, Aycock, Pugh, Taylor, and Cannella (1998) report satisfactory subscale reliability ranging from .81 to .84 using coefficient alpha on 2,405 case samples to obtain internal consistency values. Results for this study were similar with Cronbach's alpha for subscales ranging from .72 to .92. The authors reported Cronbach's alpha for the Coping Resource Effectiveness scale at .91. Results for this study yielded Cronbach's alpha of .91. To ascertain validity the authors used a series of factor analyses to establish construct validity and

obtained correlations with other instruments as well as achievement variables to establish criterion-related validity. Subsequent analyses (McCarthy et al., 2000) have also supported construct validity regarding CRISEE subscales. The primary factor analysis yielded five coping resources scales with one unsupported, experimental scale: Social Confidence, Behavior Control, Peer Acceptance, Academic Confidence, Family Support, and, an experimental scale, Responsibility. Each scale is further described below.

Social Confidence (SC) (14 items). High scorers on this scale report that they freely disclose their feelings and opinions, are assertive in negotiating their needs, relate comfortably with peers, and behave independently of others when appropriate. Consequently, such students should move freely among other children and youth and actively seek opportunities to be with them. They are more apt to attend extra-curricular activities than students who are less socially confident. Results for the sample used in this study yielded a Cronbach's alpha of .80.

Behavior Control (BC) (13 items). Students who score high on Behavior Control generally are cooperative and seldom create problems either in their schools or their communities. They seldom break rules, pick on other students, or get into fights. They usually handle their anger in a socially appropriate manner and usually maintain positive relationships with their teachers. Results for the sample used in this study yielded a Cronbach's alpha of .81.

Peer Acceptance (PA) (14 items). High scorers on Peer Acceptance usually feel liked and accepted by other children. They report that other children like them, treat them well, and like their appearance. They make friends easily and get along well with others. Results for the sample used in this study yielded a Cronbach's alpha of .93.

Academic Confidence (AC) (15 items). Students scoring high on this scale report that they feel confident of their ability to do well in school, have good time management skills, and do quality work. Results for the sample used in this study yielded a Cronbach's alpha of .81.

Family Support (FS) (13 items). Students who score high on this scale report that their families are supportive, accepting, and helpful. Such families help their children with homework and problem-solving, spend time with them, and listen to them. Such students generally feel happy and secure and have a sense of belonging at home. Results for the sample used in this study yielded a Cronbach's alpha of .73.

Responsibility (RS) (10 items). Students who score high on Responsibility report that they are cooperative and willing to follow directions. They recognize the expectations of parents and teachers and attempt to meet these expectations. They apply themselves seriously to assigned tasks and are diligent in their completion. Because of the experimental nature of this scale, it was not used for the purposes of this study. Both the authors and other researchers

(McCarthy et al., 2000) have found that this scale does not emerge as a distinct construct in factor analyses.

Coping Resources Inventory (CRI). See Appendix E. The Coping Resources Inventory (Hammer, 1988) is a 60 item self-report instrument designed for use with adults. The CRI use a 4-point Likert scale format (never or rarely, sometimes, often, and always or almost always) to describe behavior the participant has engaged in within the last 6 months. The instrument takes about 10 minutes to complete. The CRI is designed to measure an individual's current coping resources used to manage stress. The instrument yields a Total Resource scale, calculated by computing the sums of the subscales as well as five individual subscale scores. Higher scores indicate higher levels of resources. The CRI consists of five subscales: cognitive (the extent to which individuals maintain a positive sense of self-worth, a positive outlook towards others, and optimism about life in general), social (the degree to which individuals are imbedded in social networks that are able to provide support in times of stress), emotional (the degree to which individuals are able to accept and express a range of affect, based on the premise that range of emotional response aids in ameliorating long-term negative consequences of stress), spiritual/philosophical (the degree to which actions of individuals are guided by stable and consistent values derived from religious, familial, or cultural tradition or from personal philosophy), and physical

(the degree to which individuals enact health-promoting behaviors believed to contribute to increased physical well-being). For the purposes of this study, the Total Resource scale score was used.

Hammer (1988) reports high internal consistency ranging from .89 to .94 for the Total Resource score and from .69 to .84 for subscale scores, using Cronbach's alpha on a sample of 749. Similar results were found in this study: Cronbach's alpha for the Total Resource score was .9525 with a range of .6994 to .9156 for subscale scores. Other researchers have found similar results with Cronbach's alpha ranging from .77 to.91 (Pollack, Harvin & Cramer, 2000). Hammer reported that test-retest reliability, while satisfactory, was conducted on a relatively small sample size of 115. Cronbach's alpha ranged from .60 to .73 for subscale and Total Resource scores. The author investigated predictive validity of the CRI using a hierarchical multiple regression analysis on two separate occasions to ascertain additional variance accounted for by the CRI after other variance had been partialled out (i.e., life events and physical components). Both analyses revealed that the CRI accounted for at least 30% of the variance in stress symptoms. The CRI has been used in a number of studies including those that have addressed personality characteristics as related to coping resources (Norlander, Bergman & Archer, 2002), bipolar disorder in African-Americans and Caucasians (Pollack, Harvin & Cramer, 2000), and addiction treatment (Kominars, 1997).

Behavior Assessment Scale for Children (BASC). The Behavior Assessment Scale for Children (Reynolds & Kamphaus, 1992) is a mulitmethod, multidimensional scale evaluating the behavior and self-perceptions of children aged 8-18. Two forms of the BASC were used: the Self-Report of Personality Child Form (BASC SRP) and the Parent Rating Scales Form (BASC PRS). Each form has a version designed to capture the behavior and/or self-perceptions of the child according to his or her age. The BASC scores were interpreted using national age norms (General, Female, and Male). Composite scores, which included the Emotional Symptoms Index (BASC SRP) and the Behavioral Symptoms Index (BASC PRS), were used in the study. Composite scores provide a general understanding of the child's level of functioning. Higher scores (65 or above) generally reflect a greater level of distress or dysfunction for that scale. Scores below 40 can also indicate distress or dysfunction, as in the case of a subscale measuring withdrawal from others. For the purposes of this study, the composite scores for both self-report and parent measures were used.

The authors of the BASC report composite score internal consistency reliability ranging from .80 to .90 for both the child and adolescent versions of the Child Forms. Test-retest reliability for the Child Forms ranges from .57 to .84. The authors completed a factor analysis for both the BASC SRP and PRS according to the age level (child and adolescent) version as well as a covariance

structure analysis to assess validity of the instrument. The authors concluded that the data from their investigations provided substantial evidence to support validity.

The authors report composite score internal consistency scores ranging from .88 to .94 for each version of the Parent Forms. Test-retest reliability for the Parent Forms ranges from .70 to .85 for both age levels. The authors report interrater reliability (using both parents) ranging from .46 to .67 for all age levels. To assess validity, the authors conducted a factor analysis, covariance structure analysis, and correlated the instrument with other similar instruments.

Each form of the BASC is described below. Statistics for this study are based on participant Groups 2 and 3 unless otherwise noted.

Behavior Assessment Scale for Children Self-Report of Personality Child Form (BASC SRP-C). See Appendix F. The Behavior Assessment Scale for Children Self-Report of Personality Child Form is the form designed for children aged 8-11 and consists of 152 true/false items, which take about 30 minutes to complete. This self-report scale allows the child to describe his or her emotions and self-perceptions. The scale yields a composite score, the Emotional Symptoms Index (ESI), as well as 4 scores: Clinical Maladjustment, School Maladjustment, Other Problems, and Personal Adjustment. The BASC SRP-C has 12 scales that comprise each score. Anxiety, Atypicality, Locus of Control, and Social Stress make up the Clinical Maladjustment score. Attitude to School and

Attitude to Teachers comprise the School Maladjustment score while Relations with Parents, Interpersonal Relations, Self-Esteem, and Self-Reliance comprise the Personal Adjustment score. The ESI is composed of the anxiety, social stress, depression, sense of inadequacy, interpersonal relations, and self-esteem scales. Validity of the participant's response is controlled for using special indexes (the "F" index and the "V" index) designed to detect invalid responses due to poor reading comprehension, failure to follow directions, or poor contact with reality. The overall composite score, Emotional Symptoms Index (ESI), was used in this study. For the sample used in this study, the Emotional Symptoms Index (ESI) range was 36 to 81. The BASC SRP-C mean *T* score range for the ESI is 50.4 to 58.6 based on clinical norms.

Clinical norms for the BASC SRP-C subscales are based on seven clinical and educational categories (Conduct Disorder, Behavior Disorder, Depression, Emotional Disturbance, Attention Deficit Hyperactivity Disorder, Learning Disability, and Mild Mental Retardation) and were based on either a clinical child group (ages 8-11) or a combined group of both children and adolescents (ages 8-17). For Conduct Disorder, mean *T* scores of the clinical groups for each subscale and composite scales ranged from 43.9 to 58.5 (n = 75, mean age = 13.7) based on a combined group of children and adolescents. For Behavior Disorder, a child group only, the range was 43.1 to 55.7 (n = 96, mean age = 9.3). For Depression, a combined group, the range was 38.2 to 58.5 (n = 33, mean age = 13.2). For

Emotional Disturbance, a combined group, the range was 36.7 to 59.1 (n = 13, mean age = 11.4). For Attention Deficit Hyperactivity Disorder, a child only group, the range was 48.6 to 54.5 (n = 54, mean age = 8.8). For Learning Disability, a child only group, the range was 48.1 to 52.8 (n = 160, mean age = 9.8). For Mild Mental Retardation, a combined group, the range was 46.2 to 57.3 (n = 37, mean age = 10.3).

Behavior Assessment Scale for Children Self-Report of Personality Adolescent Form (BASC SRP-A). See Appendix G. The Behavior Assessment Scale for Children Self-Report of Personality Adolescent Form is the form designed for children aged 12-18 and consists of 186 true/false items, which take about 30 minutes to complete. This self-report scale allows the child to describe his or her emotions and self-perceptions. The scale yields a composite score, the Emotional Symptoms Index (ESI), as well as 4 scores: Clinical Maladjustment, School Maladjustment, Other Problems, and Personal Adjustment. The BASC SRP-A has 14 scales that comprise each of the scores. Anxiety, Atypicality, Locus of Control, Social Stress, and Somatization make up the Clinical Maladjustment score. Attitude to School, Attitude to Teachers, and Sensation Seeking comprise the School Maladjustment score while Relations with Parents, Interpersonal Relations, Self-Esteem, and Self-Reliance comprise the Personal Adjustment score. The ESI is composed of the anxiety, social stress, depression, sense of inadequacy, interpersonal relations, and self-esteem scales. Validity of

the participant's response is controlled for using special indexes (the "F" index, the "L" or "fake good" index, and the "V" index) designed to detect invalid responses due to poor reading comprehension, failure to follow directions, or poor contact with reality. The overall composite score, Emotional Symptoms Index (ESI), was used in this study. For the sample used in this study, the Emotional Symptoms Index (ESI) range was 42 to 70. The BASC SRP-A mean *T* score range for the ESI is 49.5 to 58.6 based on clinical norms.

Clinical norms for the BASC SRP-A subscales are based on six clinical and educational categories (Conduct Disorder, Behavior Disorder, Depression, Emotional Disturbance, Learning Disability, and Mild Mental Retardation) and were based on either a clinical adolescent group (ages 12-17) or a combined group of both children and adolescents (ages 8-17). For Conduct Disorder, mean *T* scores of the clinical groups for each subscale and composite scales ranged from 43.9 to 58.5 (n = 75, mean age = 13.7) based on a combined group of children and adolescents. For Behavior Disorder, an adolescent group only, the range was 47.1 to 57.0 (n = 29, mean age = 13.9). For Depression, a combined group, the range was 38.2 to 58.5 (n = 33, mean age = 13.2). For Emotional Disturbance, a combined group, the range was 36.7 to 59.1 (n = 13, mean age = 11.4). For Learning Disability, an adolescent only group, the range was 46.3 to 52.9 (n = 152, mean age = 14.6). For Mild Mental Retardation, a combined group, the range was 46.2 to 57.3 (n = 37, mean age = 10.3).

Behavior Assessment Scale for Children Parent Rating Scales Child Form (BASC PRS-C). See Appendix H. The Behavior Assessment Scale for Children Parenting Rating Scales Child Form is the form designated for the behavior of children aged 6-11. This parent report scale allows the parent to describe his or her child's observable behavior and provide a structured developmental history. This scale is a comprehensive measure of the participant's adaptive and problem behaviors in community and home settings. The BASC PRS-C consists of 138 items containing behavior descriptors using a four-point Likert scale ranging from "never" to "almost always". The form takes about 10-20 minutes to complete. The BASC PRS-C yields a Behavioral Symptoms Index (BSI) score, which is comprised of the following scales: Aggression, Hyperactivity, Anxiety, Depression, Attention Problems, and Atypicality. The BSI is a broad composite score that assesses the overall level of problem behaviors. The BASC PRS-C also yields 5 domain scores: Externalizing Problems, Internalizing Problems, School Problems, Other Problems, and Adaptive Skills. The Aggression, Hyperactivity, and Conduct Problems scales make up the Externalizing Problems score. The Internalizing Problems score is comprised of the Anxiety, Depression, and Somatization scales. The Adaptive Skills score is comprised of the Adaptability, Leadership, and Social Skills scales. The scale includes an "F" index designed to check on the validity of the parent ratings as well as critical items that can be interpreted individually. The overall

composite score (BSI) was used in this study. For the sample used in this study, the BSI mean *T* score range was 38 to 85. The BASC PRS-C mean *T* score range for the BSI is 56.8 to 72.4 based on clinical norms.

Clinical norms for the BASC PRS-C subscales are based on eight clinical and educational categories (Conduct Disorder, Behavior Disorder, Depression, Emotional Disturbance, Attention Deficit Hyperactivity Disorder, Learning Disability, Mild Mental Retardation, and Autism) and were based on either a clinical child group (ages 8-11) or a combined group of both children and adolescents (ages 8-17). For Conduct Disorder, mean *T* scores of the clinical groups for each subscale and composite scales ranged from 31.9 to 72.9 (n = 40, mean age = 13) based on a combined group of children and adolescents. For Behavior Disorder, a child group only, the range was 37.3 to 67.6 (n = 87, mean age = 8.8). For Depression, a combined group, the range was 25.7 to 79.7 (n = 29, mean age = 13.7). For Emotional Disturbance, a combined group, the range was 33.2 to 67.1 (n = 16, mean age = 10.4). For Learning Disability, a child only group, the range was 45.3 to 57.9 (n = 188, mean age = 9.1). For Mild Mental Retardation, a child only group, the range was 35.1 to 61.9 (n = 63, mean age = 8.6). For Autism, a combined group, the range was 31.7 to 68.2 (n = 16. mean age = 10.1).

Behavior Assessment Scale for Children Parent Rating Scales Adolescent Form (BASC PRS-A). See Appendix J. The Behavior Assessment

Scale for Children Parenting Rating Scales Adolescent Form is the form designated for evaluating the behavior of children aged 12-18. This parent report scale allows the parent to describe his or her child's observable behavior and provide a structured developmental history. This scale is a comprehensive measure of the participant's adaptive and problem behaviors in community and home settings. The BASC PRS-A consists of 126 items containing behavior descriptors using a four-point Likert scale ranging from "never" to "almost always". The form takes about 10-20 minutes to complete. The BASC PRS-A yields a Behavioral Symptoms Index (BSI) score, which is comprised of the following scales: Aggression, Hyperactivity, Anxiety, Depression, Attention Problems, and Atypicality. The BSI is a broad composite score that assesses the overall level of problem behaviors. The BASC PRS-A also yields 5 domain scores: Externalizing Problems, Internalizing Problems, School Problems, Other Problems, and Adaptive Skills. The Aggression, Hyperactivity, and Conduct Problems scales make up the Externalizing Problems score. The Internalizing Problems score is comprised of the Anxiety, Depression, and Somatization scales. The Adaptive Skills score is comprised of the Leadership and Social Skills scales. The scale includes an "F" index designed to check on the validity of the parent ratings as well as critical items that can be interpreted individually. The overall composite score (BSI) was used in this study. For the sample used in this study,

the BSI mean *T* score range was 37 to 104. The BASC PRS-A mean *T* score range for the BSI is 57.8 to 72.4 based on clinical norms.

Clinical norms for the BASC PRS-A subscales are based on eight clinical and educational categories (Conduct Disorder, Behavior Disorder, Depression, Emotional Disturbance, Attention Deficit Hyperactivity Disorder, Learning Disability, Mild Mental Retardation, and Autism) and were based on either a clinical adolescent group (ages 12-17) or a combined group of both children and adolescents (ages 8-17). For Conduct Disorder, mean *T* scores of the clinical groups for each subscale and composite scales ranged from 31.9 to 72.9 (n = 40, mean age = 13) based on a combined group of children and adolescents. For Behavior Disorder, an adolescent group only, the range was 38.1 to 74.6 (n = 44, mean age = 14.0). For Depression, a combined group, the range was 25.7 to 79.7 (n = 29, mean age = 13.7). For Emotional Disturbance, a combined group, the range was 33.2 to 67.1 (n = 16, mean age = 10.4). For Learning Disability, an adolescent only group, the range was 44.7 to 62.7 (n = 145, mean age = 14.5). For Mild Mental Retardation, an adolescent only group, the range was 36.9 to 60.9 (n = 26, mean age = 13.8). For Autism, a combined group, the range was 31.7 to 68.2 (n = 16. mean age = 10.1).

Child and Adolescent Functional Assessment Scale (CAFAS; Appendix D). See Appendix K. The Child and Adolescent Functional Assessment Scale (Hodges, 1999) is a behavioral assessment scale designed to rate functional impairment in

children and adolescents aged 7 to 17. The CAFAS uses a four-point Likert scale ranging from “severe impairment” to “no or minimal impairment” for a menu of behavioral descriptors and is completed by the child or adolescent’s clinician in about ten minutes. The CAFAS is comprised of eight scales on which the child or adolescent is rated: School/Work (i.e., functions satisfactorily in a group educational environment), Home (i.e., observes reasonable rules and performs age appropriate tasks), and Community (i.e., respects the rights of others and their property and acts lawfully), Behavior Toward Others (i.e., appropriateness of child’s daily behavior), Mood/Emotions (i.e., modulation of child’s emotional life), Self-harmful Behavior (i.e., extent to which the child or adolescent can cope without resorting to self-harmful behavior or verbalizations), Substance Abuse (i.e., child or adolescent’s substance use and extent to which it is inappropriate or disruptive), and Thinking (i.e., ability of child or adolescent to use rational thought processes). The CAFAS yields a Total Score, comprised of the eight scales, with a higher score reflecting greater levels of impairment. The global outcome score (Total Score) was used for the purpose of this study.

Hodges and Wong (1996) report Cronbach’s alphas between .63 and .68 using the CAFAS and report good test-retest reliability. In addition, Hodges, Doucette-Gates, and Liao report Cronbach’s alphas between .73 and .78 using the CAFAS. Results for this study were slightly higher with Cronbach’s alpha of .9082 for the Total Score. Hodges (1999) reports high interrater reliability

(Pearson correlations above .92) for the CAFAS Total Score. Hodges also found concurrent as well as predictive criterion-related validity for the CAFAS.

Wechsler Abbreviated Scales of Intelligence (WASI). The Wechsler Abbreviated Scales of Intelligence (The Psychological Corporation, 1999) is a cognitive measure designed for ages 6 to 89. It is nationally standardized and yields three scores: Verbal, Performance, and Full Scale IQ. The WASI consists of four subtests: Vocabulary, Block Design, Similarities, and Matrix Reasoning. The WASI takes approximately 30 minutes to administer. The reliability coefficients for the Full Scale IQ range from.92 to .95 across eleven children's age groups with an average Full Scale IQ reliability coefficient of .96 for the entire children's sample (The Psychological Corporation, 1999). The Full Scale IQ score, comprised of the combined Performance and Verbal scores, was used in the proposed study.

Table 2 provides a summary of the scores and their abbreviations from each measure that was used in the analyses.

Table 2. Summary of Instruments and Abbreviations.

Instrument	**Abbreviation**	**Score(s) Collected**	**Score(s) Used In Analysis**
Coping Resources Inventory Scales for Educational Enhancement	CRISEE	Coping Resource Effectiveness (overall) score: 1. Pretest 2. Posttest	Pretest overall score

Coping Resources Inventory	CRI	Total Resource Scale (overall) score: 1. Pretest 2. Posttest	Pretest overall score

Instrument	Abbreviation	Score(s) Collected	Score(s) Used In Analysis
Behavior Assessment Scale for Children	BASC		
• Self-Report Child	BASC SRP-C	Externalizing Symptoms Index (ESI) composite score 1. Pretest 2. Posttest	Posttest composite (ESI) score
• Self-Report Adolescent	BASC SRP-A	Externalizing Symptoms Index (ESI) composite score 1. Pretest 2. Posttest	Posttest composite (ESI) score
• Parent Report Child	BASC PRS-C	Behavioral Symptoms Index (BSI) composite score 1. Pretest 2. Posttest	Posttest composite (BSI) score
• Parent Report Adolescent	BASC PRS-A	Behavioral Symptoms Index (BSI) composite score 1. Pretest 2. Posttest	Posttest composite (BSI) score
Child and Adolescent Functional Assessment Scale	CAFAS	Global outcome score (Total Score): 1. Pretest 2. Posttest	Posttest global outcome score
Wechsler Abbreviated Scales of Intelligence	WASI	Full Scale IQ (FSIQ)	Full Scale IQ (FSIQ)

Chapter 4: Results

This chapter provides a detailed report of the results of this study. First, descriptive information and statistics of measures and participant groups are examined to ensure that no departures from normality exist. Next, correlation information regarding all of the study variables is presented and discussed. This is followed by an examination of the original study hypotheses with regression analyses results. Lastly, a discussion of the exploratory comparisons conducted to further examine collected data is presented, including post hoc analyses of significant pretest and posttest means of coping resources and outcome measures.

DESCRIPTIVE STATISTICS FOR MEASURES AND PARTICIPANT GROUPS.

Descriptive Information for Measures.

Descriptive statistics for all of the measures included in the study were computed to determine range, mean, standard deviation, skewness and kurtosis. Statistics were computed for both pretest and posttest measures based on global scores. Table 3 represents the descriptive statistics for all of the measures used in the study.

Table 3. Descriptive Statistics for Study Instruments.

Instrument	N	Range	Min	Max	Mean	Std. Dev.	Skewness	Kurtosis
Pre CRISEE	23	51	18	69	43.96	14.521	-.202	-.527
Post CRISEE	16	42	24	66	44.81	14.279	.053	-1.019
Pre CRI	22	134	76	210	164.95	32.350	-.801	1.305

Post CRI	15	85	131	216	175.19	23.370	.036	-.824
Pre BASC SRP	28	42	39	81	57.57	12.063	.157	-.740
Post BASC SRP	16	43	38	81	55.31	12.595	.246	-.831
Pre BASC PRS	25	68	36	104	66.52	18.203	.292	-.157
Post BASC PRS	17	47	41	88	59.53	14.544	.431	-1.069
Pre CAFAS	21	110	10	120	50.00	32.711	.502	-.699
Post CAFAS	17	100	0	100	40.59	27.035	.231	-.051

Descriptive Information for Participant Groups.

To address possible systematic differences among the groups of participants involved in the study, various means of the three groups were examined. This was done to ensure that no significant differences existed between the groups in terms of their composition. Statistical significance among the three groups (Group 1—Consent Only, Group 2—Consent + Pretest Measures, and Group 3—Group used for Analysis) based on categorical demographic variables (gender, ethnicity, and SES) was addressed using a Pearson Chi Square to determine significance. Table 1 (previously presented in Chapter 3) represents the descriptive statistics for gender and ethnicity. Pearson Chi Square value for gender was 10.054, $n = 54$, and was significant ($p = .007$). These results are consistent with current and past findings that indicate the child psychotherapy population is largely male. In addition, these results likely reflect the group used for analysis that is approximately 94% male. Pearson Chi Square for ethnicity was 11.027, $n = 54$, and was nonsignificant ($p = .088$). These findings are consistent with current and past research that has repeatedly shown no significance among

groups based on ethnicity in relation to child psychotherapy outcome. A Pearson Chi Square was computed to address differences among groups based on socioeconomic status. The Pearson Chi Square value was 37.684, $n = 54$, and was nonsignificant ($p = .105$). ANOVA was used to determine if there were statistically significant group differences in the age of the participants completing various portions of the study. No significance was found among groups based on age ($F = .655$, $p = .524$). WASI Full Scale IQ scores ranged from 74 to 151, with $m = 102$, $sd = 18.638$.

CORRELATIONS AMONG VARIABLES USED IN STUDY.

An intercorrelation matrix was computed to examine relationships among all of the variables and is presented in Table 4. Statistical significance was determined using an alpha level of .05. No significant correlations were found between the three predictor variables (CRISEE, CRI, FSIQ). Although the CRI and the CRISEE are both measures of coping resources, they are designed for different populations, child versus adult. It was, therefore, not expected that correlations would have indicated the CRI and CRISEE measure the same construct in the same way. The relationship between cognitive functioning and coping resources has not been established. For the purposes of this study, cognitive functioning and coping resources were operationally defined as separate constructs with no indication from past research that they are related; therefore, from an exploratory perspective, it was not expected that correlations would indicate that Full Scale IQ and coping resources (of that of the child or parent) were tapping the same construct.

Table 4. Intercorrelation Matrix of Independent and Dependent Variables.

	FSIQ	PRE CRISEE	PRE CRI	PRE BASC SRP	PRE BASC PRS	PRE CAFAS	POST BASC SRP	POST BASC PRS	POST CAFAS	POST CRISEE	POST CRI
FSIQ	1										
PRE CRISEE	-.183	1									
PRE CRI	-.301	.015	1								
PRE BASC SRP	-.140	-.668*	-.020	1							
PRE BASC PRS	-.010	-.514*	-.082	.369	1						
PRE CAFAS	.080	-.116	-.028	.295	.587*	1					
POST BASC SRP	-.572*	-.377	.333	.776*	.532	.533*	1				
POST BASC PRS	.067	-.096	.049	.259	.832*	.860*	.573*	1			
POST CAFAS	-.279	.152	.027	.147	.557*	.838*	.607*	.885*	1		
POST CRISEE	.287	.592*	-.255	-.713*	-.770*	-.687*	-.838*	-.685*	-.612*	1	
POST CRI	-.245	-.017	.860*	.105	-.013	-.150	.100	-.203	-.073	-.016	1

Note. Based on data from participant Groups 2 and 3, n = 31. Please see Table 2 in Chapter 3 for a detailed explanation of instrument abbreviations.
* p • 0.05.

Among predictor variables, full scale IQ was moderately negatively correlated with the POST BASC SRP (*r* = -.572), suggesting those Groups 2 and 3 participants with higher IQ scores report less problems. The CRISEE was moderately negatively correlated with both the PRE BASC SRP (*r* = -.668) and the PRE BASC PRS (*r* = -.514), suggesting that those Groups 2 and Group 3

participants and respective parents reporting fewer coping resources report higher levels of behavioral problems. As expected, pretest and posttest scores for each outcome measure, (BASC SRP, *r* = .*776;*, BASC PRS, *r* = .832; CAFAS, *r* = .838), were found to be strongly positively correlated. Table 4 also shows that among pretest scores a positive correlation was found between the PRE BASC PRS and the PRE CAFAS (*r* = .587), suggesting, perhaps, that clinician ratings are more reflective of the level of behavioral problems reported by the parent versus the child. The PRE CAFAS yielded positive correlations in the moderate to strong range for both the POST BASC SRP (*r* = .533) and the POST BASC PRS (*r* = .860). Among posttest scores, the POST BASC SRP yielded positive correlations in the moderate range for the POST BASC PRS (*r* = .573) and the POST CAFAS (*r* = .607), suggesting that the child's report of outcome reflects the same level of outcome as seen by the parent/guardian and clinician. The POST BASC PRS was strongly positively correlated with the POST CAFAS (*r* = .885), again indicating that clinician ratings, perhaps, are more reflective of the level of behavioral problems reported by the parent versus the child. Interestingly, no correlation was found between any scores for the CRISEE and the CRI, inviting a variety of speculations as to why. This may be reflective of a difference in the designs of the two measures or may be indicative of some deeper disconnection between parent and child coping resources.

EXAMINATION OF RESEARCH STUDY HYPOTHESES.

Hierarchical multiple regression was used to determine whether child and parent coping resources, as well as child's IQ, contributed to the prediction of

treatment outcome over and above the participant's pretest scores on each outcome measure. After controlling for the amount of variance contributed by each pre-test (Pre BASC SRP, Pre BASC PRS, Pre CAFAS), a total of three multiple regression equations and, therefore, three dependent variables were used. The three dependent variables consisted of the following: BASC SRP global posttest score (child form), BASC PRS global posttest score (parent form), and the CAFAS global posttest score (clinician instrument). Because of the small sample size used in this study, the regression analyses used in the study are exploratory in nature.

Research Study Hypothesis #1: Regression Analysis for Child Reported Outcome.

Coping resources and the participant's level of cognitive functioning were expected to account for a significant amount of unique variance in the prediction of treatment outcome (as measured by the BASC SRP). It was expected that the participant's coping resources, as measured by the overall CRISEE score, and cognitive functioning as measured by the WASI, and, in one case the WISC-III, would account for a significant amount of unique variance in self-reported treatment outcome by the child, as measured by the BASC SRP. It was also expected that the parental coping resources as measured by the overall CRI score would account for a significant amount of unique variance in treatment outcome as measured by the BASC SRP.

After controlling for the amount of variance contributed by pretest measures (PRE BASC SRP), data analysis yielded no significance for coping

resources measures (CRISEE; CRI) and cognitive functioning (IQ) as predictors of treatment outcome as measured by the self-report of the child (POST BASC SRP), F (4,8) =2.773, p = .102. Results did not support the hypothesis that coping resources measures and cognitive functioning would account for a significant amount of unique variance in treatment outcome as measured by the dependent variable. Table 5 represents the regression model for child self-reported outcome.

Table 5. Regression Analysis for POST BASC SRP (Child Self-Reported Outcome).

Model	df	F	p-value	R^2
1 PRE BASC SRP	1,11	10.322	.008	.484
2 PRE BASC SRP	4,8	2.773	.102	.581
CRISEE				
CRI				
FSIQ				

Note. Based on participant Group 3, n = 13.

Research Study Hypothesis #2: Regression Analysis for Parent Reported Outcome.

Coping resources and the participant's level of cognitive functioning were expected to account for a significant amount of unique variance in the prediction of treatment outcome (as measured by the BASC PRS). It was expected that the participant's coping resources, as measured by the overall CRISEE score, and cognitive functioning as measured by the WASI, and, in one case the WISC-III, would account for a significant amount of unique variance in parent reported

treatment outcome of the child, as measured by the BASC PRS. It was also expected that the parental coping resources as measured by the overall CRI score would account for a significant amount of unique variance in treatment outcome as measured by the BASC PRS.

After controlling for the amount of variance contributed by pretest measures, data analysis yielded no significance for coping resources measures (CRISEE; CRI) and cognitive functioning (IQ) as predictors of treatment outcome based on parent report (POST BASC PRS), F (4,8) = 12.576, p = .002. Significance was found only among the pretest scores of the outcome measure (PRE BASC PRS). Beta values for coping resources (CRISEE; CRI) and cognitive functioning (WASI FSIQ) measures were not significant at the .05 level. Results did not support the hypothesis that each coping resources measure would account for a significant amount of unique variance in treatment outcome as measured by the dependent variable. Table 6 represents the regression model for parent report of child behavioral outcome.

Table 6. Regression Analysis for POST BASC PRS (Parent Report of Child Outcome).

Model	df	F	p-value	R^2
1 PRE BASC PRS	1,11	30.753	.000	.737
2 PRE BASC PRS	4,8	12.576	.002	.863
CRISEE				
CRI				

FSIQ	

Note. Based on participant Group 3, n = 13.

Research Study Hypothesis #3: Regression Analysis for Clinician Reported Outcome.

Coping resources and the participant's level of cognitive functioning were expected to account for a significant amount of unique variance in the prediction of treatment outcome (as measured by the CAFAS). It was expected that the participant's coping resources as measured by the overall CRISEE score would account for a significant amount of unique variance in treatment outcome as measured by the CAFAS. It was also expected that the parental coping resources as measured by the overall CRI score would account for a significant amount of unique variance in treatment outcome as measured by each the CAFAS.

After controlling for the amount of variance contributed by pretest measures, data analysis yielded no significance for coping resources measures (CRISEE; CRI) and cognitive functioning (IQ) as predictors of treatment outcome based on clinician report of outcome (CAFAS), F (4,7) = 6.483, p = .017. Significance was found only among pretest scores for the outcome measure (CAFAS). Beta values for coping resources (CRISEE; CRI) and cognitive functioning (WASI FSIQ) measures were not significant at the .05 level. Results did not support the hypothesis that each coping resources measure would account for a significant amount of unique variance in treatment outcome as measured by

the dependent variable. Table 7 represents the regression model for clinician report of child behavioral outcome.

Table 7. Regression Analysis for CAFAS (Clinician Report of Child Outcome).

Model	df	*F*	*p*-value	R^2
1 PRE CAFAS	1,10	27.876	.000	.736
2 PRE CAFAS	4,7	6.483	.017	.787
CRISEE				
CRI				
FSIQ				

Note. Based on participant Group 3, n = 12.

POST-HOC ANALYSES.

Mean Differences for Participant Groups 2 and 3.

Although not part of the original hypotheses regarding prediction, independent t-tests were conducted to determine any significant differences between pretest means of independent and dependent variables in Groups 2 and 3. This was done as an exploratory step to further examine data collected on the two groups in terms of understanding and interpreting the difference between participants who partially participated in the study and those who fully participated. Results indicated no significant differences between CRISEE (coping resources) means of Group 2 (n = 7, m = 38.57, sd = 17.203) and Group 3 (n = 16, m = 46.25, sd = 13.112) F = .556, p = .464. For parent coping resources (CRI), results yielded no significant differences between means of Group 2 (n = 7,

m = 158.86, *sd* = 44.258) and Group 3 (*n* = 15, *m* = 167.80, *sd* = 26.515) *F* = 1.153, *p* = .296. In terms of child self-report of behavioral problems (PRE BASC SRP), results indicated no significant differences between means for Group 2 (*n* = 11, *m* = 59.27, *sd* = 12.531) and Group 3 (*n* = 17, *m* = 56.47, *sd* = 12.006) *F* = .041, *p* = .841. For parent report of behavioral problems (PRE BASC PRS), no significant differences were found between means of Group 2 (*n* = 10, *m* = 69.40, *sd* = 20.457) and Group 3 (*n* = 15, *m* = 64.60, *sd* = 17.003) *F* = .440, *p* = .514.

Mean Differences for Participant Group 3: Coping Resources.

Although not part of the original hypotheses regarding prediction, dependent t-tests were conducted to determine differences between pretest and posttest means on both coping resources and outcome measures in Group 3. This was done as an exploratory step to capture mean differences which might suggest change indicative of improvement or worsening of reported coping resources or behavioral symptoms. This was considered an important step in understanding the data collected for the study. For Group 3 participant coping resources, results indicated no significant differences between CRISEE means, (*m* = 46.06, *sd* = 13.092 and *m* = 44.75, *sd* = 14.401) *t* = .420, *p* = .681. The standardized effect size index, *d*, was.09, which is quite small but expected for such a low sample size (Cohen, 1988). For Group 3 parent coping resources, results indicated no significant differences between CRI means, (*m* = 170.44, *sd* = 27.703 and *m* = 175.19, *sd* = 23.370) *t* = -1.342, *p* = .200. Again the effect size index, *d* = -.018, was small but expected given the low sample size.

Mean Differences for Participant Group 3: Behavioral Outcome.

In terms of outcome, results indicated no significant differences between global score means for Group 3 self-report of outcome by the child (BASC SRP), (*m* = 57.69, *sd* = 11.700 and *m* = 55.31, *sd* = 12.595) *t* = 1.161, *p* = .264, with a small effect size index, *d* = .19. For Group 3 outcome measured by parent report (BASC PRS), results indicated a significant difference between global score means, (*m* = 63.40, *sd* = 17.451 and *m* = 57.87, *sd* = 13.416) *t* = 2.199, *p* = .045. Cohen's *d* value was .35, which is small. In light of that fact, these results suggest that Group 3 parents observed improvement in their child's behaviors. Results also indicated a significant difference between global score means for Group 3 outcome as measured by clinician report, (*m* = 57.65, *sd* = 7.647 and *m* = 40.59, *sd* = 27.035) *t* = 4.081, *p* = .001. This suggests that, overall, clinicians observed improvement in Group 3 participants' behaviors. The standardized effect size index, *d*, was .58, which is considered to be a medium size effect. This increase in effect size compared to the child and parent indices may be best explained by a slight increase in the *n* used for the computation of this statistic. However, the sample size used for this study is notably low. Therefore, any observed changes are likely to appear more salient than in a more stable sample size.

After significance was indicated for the above Group 3 means, subsequent t-test results were conducted as an exploratory step to determine differences between subscale means only for those comparisons resulting in statistical significance. For outcome as reported by the Group 3 parents, results indicated significant differences between the following pretest and posttest subscale means

(BASC PRS): Conduct Problems, (*m* = 60.47, *sd* = 13.081 and *m* = 53.13, *sd* = 9.942) *t* = 3.154, *p* = .007; Adaptability (Adaptive Skills), (*m* = -4.38, *sd* = 66.581 and *m* = 39.50, *sd* = 10.126) *t* = -2.696, *p* = .017; Externalizing Problems, (*m* = 62.87, *sd* = 19.342 and *m* = 56.60, *sd* = 14.711) *t* = 2.888, *p* = .017. For Group 3 outcome as measured by the clinician, results indicated significant differences between the following pretest and posttest subscale means (CAFAS): School Performance (Behavior in School), (*m* = 11.43, *sd* = 9.493 and *m* = 7.86, *sd* = 8.926) *t* = 2.687, *p* = .019; Mood/Emotions, (*m* = 15.71, *sd* = 7.559 and *m* = 10.00, *sd* = 9.608) *t* = 2.828, *p* = .014.

CHAPTER 5: DISCUSSION

This chapter will provide a discussion of the results presented in the previous chapter. Results will first be discussed in terms of the correlations among variables of the study, followed by a discussion of the original hypotheses, the contribution of coping resources and cognitive functioning to the prediction of child psychotherapy outcome. Next, a discussion of post-hoc analyses, including exploratory comparisons, will be presented. Limitations of the study and implications for future research will then be discussed.

DISCUSSION OF CORRELATIONS AMONG VARIABLES USED IN STUDY.

The intercorrelational matrix computed to examine relationships among all of the variables provided some unanticipated results. The parent coping resources measure (CRI) did not correlate with any other measure. In contrast, the posttest scores of the self-reported child coping resources measure (CRISEE) were significantly negatively correlated with all but one (the CRI which measured parent self-reported coping resources) pretest and posttest behavioral measure scores. This is contradictory to the original rationale for including parent coping resources: that they might be more likely to be significantly related to the therapeutic process than even the child's. One interpretation of these findings might be that the child's coping resources are potentially a more accurate reflection of reported overall levels of behavioral problems. That is, children reporting fewer coping resources after three months of psychotherapy are reporting higher levels of behavioral problems both in terms of their own report

(before and after the psychotherapy intervention) and in terms of parent and clinician observations (before and after the intervention). One interpretation of these results is that coping resources of the child are indeed stable and are related to higher levels of behavioral problems—even though overall improvement was reported. These results may also be complicated by the time constraint of three months. Longer follow up periods may be needed to capture potential behavioral changes after psychotherapy. In addition, longer follow ups periods may be needed to capture any changes in coping resources as well.

There is one remaining hypothesis related to coping resources and the use of the BASC as a behavioral outcome measure for self. Because the BASC self-report is based on behavior and personality variables, it is possible the child coping resources measure (CRISEE)) is more reflective in and of itself of personality. That is, it may be difficult to use the BASC to tease out changes in the child if coping resources are more stable, personality-type variables. More research on child coping resources is needed to help better define their role in understanding the development of the child.

DISCUSSION OF ORIGINAL HYPOTHESES OF THE STUDY.

This study attempted to identify the coping resources and cognitive functioning as predictors in determining child psychotherapy outcome according to self-report of the child, parent report of the child's behavior, and clinician report of the child's behavior. Although coping resources have been investigated in relation to outcomes in other child domains, no research has to date been

published which addresses their role in the domain of child psychotherapy. One of the contributions of this study, then, is an exploratory attempt to determine the relevance of coping resources in the domain of child and adolescent psychotherapy. Being able to identify coping resources as predictors should aid the clinician in more efficiently determining areas of strength and areas of growth for the client and, therefore, contribute to a more efficient therapeutic process.

Discussion of Regression Analyses for Research Hypotheses.

Regression analyses of this study indicate coping resources of the child and/or parent combined with cognitive functioning do not have predictive value in determining child psychotherapy outcome as reported by the child, parent or the clinician. In some regards, this information is not surprising given that the literature has shown an unclear relationship between cognitive functioning, in terms of IQ, and child psychotherapy outcome (Barkley, Gueveremont, Anastopoulos, & Fletcher, 1992; Barrett, Dadds, & Rapee, 1996; Casey & Berman, 1985; Durlak & McGlinchey, 1999; Kazdin, 1995; Kazdin & Crowley, 1997; Target & Fonagy, 1994). In terms of coping resources, it is not surprising that no relationship was found given the small sample size. However, it is, perhaps, the nature of the relationship itself between coping resources and child psychotherapy outcome that might also explain these results. Although intuitively it might make sense that coping resources would be related to child psychotherapy outcome, perhaps coping resources are not predictor variables but rather mediating variables, and, therefore, more directly contribute to the therapeutic

process itself. It is difficult, of course, to make any general conclusions based on this study given its exploratory nature.

In terms of the relationship between coping resources and cognitive functioning, results indicate no significant correlations between any of the measures. Although the relationship between the two variables has not been studied, it is worth noting that a significant correlation did not exist in this study. Again, the two variables were seen as separate constructs and, therefore, not expected to be significantly related. Further speculation is warranted as cognitive functioning, in and of itself, may well be seen as a coping resource.

DISCUSSION OF POST-HOC ANALYSES.

Discussion of Mean Differences for Participant Group 3: Coping Resources.

Paired samples statistics were computed to determine if significant differences, suggesting a change in coping resources, existed between the means of pretest and posttest coping resources measures. No statistically significant differences were found, which generally would be interpreted to indicate no change occurred in coping resources. This finding is consistent with coping resources literature, which recognizes coping resources as a relatively stable variable. However, because child psychotherapy sometimes addresses the parenting capacities of parents (as it did in the case of this study), one might expect family support as a coping resource to increase. Social skills and behavior control are often specifically targeted in child psychotherapy (Durlak & McGlinchey, 1999; Kazdin, 1995; Mann & Bourdin, 1991; Weisz, Weiss, Han,

Granger & Morton, 1995); therefore, one might expect to see an increase in these coping resources as well. Additionally, peer acceptance might be expected increase as social skills and behavior control increase. Although many interventions are now short-term in focus, one might expect that these changes would be most notable several months after the intervention (Durlak & McGlinchey, 1999; Mann & Bourdin, 1991). Therefore, with a larger sample size, one might anticipate that differences in pretest and posttest coping resources measures would be found. In contrast, academic confidence as a coping resource might be less subject to modification as it appears to be at least partially influenced by the child's academic ability or even IQ. Coping resources may also be less subject to modification in general for individuals with significant limitations, such as those carrying diagnoses from the autism spectrum or psychotic spectrum. Based on this study, generalizations such as these cannot be made, only hypothesized, as the sample size does not allow us to adequately capture any potential change in coping resources.

Discussion of Mean Differences for Participant Group 3: Behavioral Outcome.

Paired sample statistics were also computed to determine significant outcome score differences. Results indicated that parents observed improvement in the child's behaviors both in terms of a composite score (Externalizing Problems) and specific subscale scores. The Externalizing Problems composite score consists of the following subscales: aggression, conduct problems, and hyperactivity. In addition, parents specifically endorsed fewer items on the conduct problems subscale, which includes items such as use of foul language,

school suspension, expression of empathy, and legal problems. Parents also reported an increase in items measuring adaptability, such as flexibility regarding transitions and routine changes, ability to share, and ability to be soothed. These results indicate that parents observed some improvement in their child's problem behaviors, which, very generally, supports the findings of child psychotherapy outcome literature (Casey & Berman, 1985; Durlak & McGlinchey, 1999; Kazdin, 1997, 1999; Weisz, Weiss, Alicke, & Klotz, 1987; Weisz, Weiss, Han, Granger, & Morton, 1995).

In terms of clinician report of outcome, results indicate that clinicians also observed significant improvement in specific child behaviors such as school performance (school behaviors) and mood/emotions. Interestingly, clinician outcome results did not support the improvement that parent results indicated relating to behaviors at home. This discrepancy, however, may be accounted for by differences in terms of measurement by each instrument (Casey & Berman, 1985; Kazdin, 1999). Although no research has been published examining the relationship between the CAFAS and the BASC, one might hypothesize that the Mood/Emotions subscale of the CAFAS may better reflect the changes observed by the parent BASC Externalizing Problems composite score (consisting of aggression, conduct problems, and hyperactivity subscales) rather than mood subscales of the BASC. The CAFAS Mood/Emotions subscale contains some items which note abrupt and intense mood changes and irritability. These, in turn, may reflect some of the subscale items on the Externalizing Problems scale, such as throwing temper tantrums and arguing. This discrepancy may also be explained

by the fact that the Externalizing Problems scale is not limited to behavior in the home and, therefore, may be a more general reflection of improvement. The ability of this study to examine this hypothesis is limited by the size of the sample used; therefore, no relationships between subscales of measures was examined. The CAFAS design speaks more specifically to the context/location in which the behavior is expressed. In turn, parents may be more likely to report to the clinician continued difficulties in the home environment even in the context of improvement as a focus of psychotherapy, although little research has examined the relationship between parents and clinician (Shapiro & Welker, 1997). This would lead to a reflection of less improvement in behavior at home as reported by the clinician.

What is interesting with regard to the behavioral improvement noted by parent and clinician is that no such increase was reflected in the coping resources measures. Results indicate that participant and parent reports of greater levels of distress, based on behavioral measures, were associated with fewer child coping resources. However, as the reported distress decreased, the coping resources remained stable. Unlike the other results, no reflection of behavioral improvement in terms of child self-report was found. However, posttest scores of the behavioral outcome measures for child, parent, and clinician were significantly correlated, suggesting that similar levels of behavioral outcome were reported. This may indicate a difference in the sensitivity of the instrument scales. For example, slight differences in reported behavior might be more likely to be reflected on the parent and clinician instruments as they are much more behaviorally based. The child

self report is based on behavioral as well as personality variables, variables which are more likely to remain stable over a shorter period of time (i.e., 3 months). Therefore, this scale may be less sensitive to changes even if the scale correlates with similar instruments indicating change (i.e., parent and clinician behavioral outcome measures). There is opportunity for further speculation. Perhaps there is no relationship between parental coping resources and child behavior. Perhaps a more flexible threshold exists regarding behavioral changes and coping resources. That is, results indicated fewer coping resources were associated with higher levels of reported distress. Therefore, one might hypothesize that coping resources are relatively stable variables that allow for behavioral improvement to occur without an increase in actual coping resources. Many researchers have, in fact, suggested that this is the exact nature of coping resources (Matheny, et al., 1986; McCarthy et al., 1997; McCarthy et al., 2000; McCarthy et al., 2002), especially with regard to perceived demands versus perceived resources (Lambert, et al., 2000; Lazarus, 1993; Matheny, et al., 1993; Pilkington et al., 1997). That is, it is coping resources themselves that can boost one's ability to manage stress, which then reduces the number of stress symptoms (i.e., behavior) observed.

One final note with regard to reported behavioral outcome (BASC) is that the posttest measure of the self report of the child (POST BASC SRP) was significantly negatively correlated with cognitive functioning (Full Scale IQ). Cognitive functioning was not correlated with any other variable. This suggests that those with higher levels of cognitive functioning reported lower levels of problem behaviors on the BASC and those with lower levels of cognitive

functioning reported greater levels of problem behaviors. This was not the case with the pretest measure, in which no significant correlation was found. Although pre and post measures of cognitive functioning were not taken, it is not believed that any change in cognitive functioning levels occurred. This may be reflective of the fact that the intercorrelation matrix included participants from both Groups 2 and 3 and not just Group 3 (the group used for analysis); therefore, pretest measures would include Group 2 scores which could influence the correlations in terms of pretest and posttest scores. Again, the sample size of this study limits the extent of interpretations one can make.

LIMITATIONS.

One limitation of this study, previously noted, is the low sample size. Using such a low sample size obviously affects the stability of both the statistics themselves and the interpretation of the results. A larger sample size might have yielded clearer results and, therefore, given more credence to the interpretation of the statistics. In addition, the time constraint of this study, three months of psychotherapy, is a limitation. Longer follow up periods are needed to more fully capture any potential changes in any of the variables. Any interpretations based on this study must be done in an exploratory manner.

Another limitation of this study is the overwhelmingly male sample used for analysis. Because the sample used in this study is overwhelmingly male, it is important to interpret results with this in mind. Therefore, whatever information might be gleaned from the results of this study is best interpreted in the context of

how one might apply the knowledge to male children and adolescents in psychotherapy.

It is also important to consider the types of instruments used in this study to determine outcome. While the CAFAS (Hodges, 1999; Hodges, Doucette-Gates, & Oinghong, 1999; Hodges & Wong, 1999) has well-established sensitivity to behavioral changes, the BASC appears to be less established in this area. Therefore, the BASC may be less sensitive to more subtle behavior changes occurring over a shorter period of time that are, nonetheless, still indicative of change. This may be also confounded by the sample size. Global outcome scores were used which limit the ability to adequately capture potential change. Again, a larger sample size would allow for more specific change to be captured based on subscales which might resolved some of the instrument's potential sensitivity issues.

Cultural differences were not clearly accounted for in this study, partially due to the small sample size. Research addressing such differences is scarce to nonexistent. In fact, efficacy of child psychotherapy in terms of multiculturalism has not been fully established as an entity. Few child psychotherapy studies have addressed the typically underserved populations (Durlak & McGlinchey, 1999), making generalizability an issue for even the most methodologically sound studies. Even with a larger sample size, it would not necessarily be plausible to address global cultural differences in this study. In order to address how coping resources relate to child psychotherapy outcome, this study might be best

replicated within a defined ethnicity to determine its relevance to that particular group versus addressing multicultural issues based on differences.

Another limitation of this study was the inability to account for differences among clinicians and their approaches. While the literature has well established the efficacy of child psychotherapy outcome in general as well as in terms of approach differences (Casey & Berman, 1985; Durlak & McGlinchey, 1999; Kazdin, 1997, 1999; Weisz, Weiss, Alicke, & Klotz, 1987; Weisz, Weiss, Han, Granger, & Morton, 1995), it is nonetheless important to capture variables that could influence outcome even in relation to predictor variables. If a large scale study were implemented, this study could be expanded to better control for clinician/approach differences, using a time-limited, standardized treatment on the basis of group or individual psychotherapy. Participants would have to be deemed appropriate for the treatment which would limit those who could participate and, at the same time, expand the opportunity for understanding any significant changes. A control group could be implemented to address any observed changes in scores for those participants receiving the intervention. This type of study would present the opportunity to examine variables of child psychotherapy in the context of both predictors and process. Kazdin (1999) has emphasized the importance of child psychotherapy research including address variables that affect therapeutic change. In this context, coping resources might well be considered a potential process variable of child psychotherapy.

IMPLICATIONS FOR FUTURE RESEARCH AND CHILD PSYCHOTHERAPY.

Future research is needed in this area for a variety of reasons. Most importantly, this study needs to be replicated with a larger sample size to adequately determine if, in fact, coping resources of the child and/or the parent are predictive of child psychotherapy outcome. More research in general is needed with regard to coping resources of children. No instrument to date has effectively defined and captured the salience of coping resources of children except for the CRISEE. While many researchers have acknowledged the importance of children's coping resources in a variety of domains, there is has been little consistency in terms of definition and measurement.

Secondly, addressing the stability of coping resources is an uncharted territory in many regards. Coping resources have traditionally been recognized as relatively stable variables, demonstrating little variability in terms of modification, in part due to the lack of research available that examines their properties. Coping resources have generally been defined as a stable set of physical, social, and psychological factors that one uses as a means of managing daily life demands and include characteristics of the functional intelligence needed for everyday living (Matheny et al., 1986; McCarthy, Lambert, & Brack, 1997). This begs the question of how these resources are developed in a child. Many researchers have already pointed to the importance of a positive family environment as a factor that nurtures specific capacities or resources that serve to promote successful outcomes in relation to the demands of childhood (Brown et al., 1993; Dornbusch, Ritter, Mont-Reynaud & Chen, 1990; Masten et al., 1988;

McCarthy, et al., 2002; Parikh, Shah, & Patel, 1986). In fact, many researchers argue that families are the initial means by which children and adolescents are introduced to coping strategies and are a significant factor in the development of coping resources (Billings & Moos, 1982; Kurtz, 1996; Sorensen, 1993). Because child coping resources are thought be impacted by the family, it could also be hypothesized that coping resources in children in psychotherapy are impacted not only developmental variables but by the psychotherapy process itself. The therapeutic process just by its nature of seeking to enhance family support, peer relationships, and behavior control seeks to enhance or modify coping resources. Because the efficacy of child psychotherapy has been well established, it is important to begin to focus on what variables actually impact the process. This study found reported behavioral improvement. One would expect that those resources contributing to a child's behavior, such as behavior control or family support, to reflect this change. For this reason, future research needs to establish the stability of this variable in child psychotherapy outcome.

Lastly, future research must continue to address the relevance of developmental variables to child psychotherapy outcome. This may be a measurement issue in that it is difficult to quantify many of the qualitative variables that go into child development. However, these variables undoubtedly affect the therapeutic process. Using symptoms or the number of symptoms rather than global scores or diagnoses may help to account for differences in presentation of problems according to development. Continuing to examine the relevance of cognitive functioning is intuitively warranted. As one might expect,

clinicians should modify their approach to meet the needs of the client, especially in terms of cognitive functioning. This will be especially important to address when considering the impact of cognitive functioning to outcome. Perhaps as we continue to further and better define coping resources of children we will be better able to determine the relationship between coping resources and cognitive functioning. In fact, one might argue that the level of cognitive functioning is in and of itself a coping resource.

Variables such as coping resources, family, and cognitive functioning may have predictive value in child psychotherapy outcome. Although predictor variables are important in understanding treatment outcome, variables in and of themselves should also help practitioners and researchers better understand the process of therapeutic change. For example, investigating interactions among the variables themselves (i.e., coping resources and cognitive functioning) is, again, a relatively uncharted territory. Kazdin (1999) suggests that little is known from such research about how to optimize therapeutic change. Kazdin also suggests that perhaps researchers have spent too much energy and effort on studying approaches and/or techniques rather than theory. That is, research should focus on theory that would provide an explanation and understanding of the relationships among variables themselves as well as how such variables function and the processes involved.

With this in mind, researchers could begin to look at coping resources as a contributing variable to the process of change. While coping resources may hold some predictive value, it could be hypothesized that they play more of a

mediating role in the psychotherapy process. It could be that as coping resources are enhanced, for example, by increasing family support, the therapeutic process could be maximized. If coping resources are capable of being modified, then the psychotherapy process, theoretically, could become much more efficient. Clinicians could identify strengths and weaknesses in a more succinct manner and then use this knowledge to boost strengths and develop the deficient resources. Clinicians might specifically choose to refer parents to a parenting group to enhance family support, children to a social skills group to enhance behavior control, social confidence, and peer acceptance, and work with the school to find ways of enhancing academic confidence if possible. In essence, this appears to be what is occurring on a clinical level today and, according to the literature, it is efficacious (Casey & Berman, 1985; Durlak & McGlinchey, 1999; Kazdin, 1997, 1999; Weisz, Weiss, Alicke, & Klotz, 1987; Weisz, Weiss, Han, Granger, & Morton, 1995). However, what is not understood is how these variables contribute to change. For instance, is it through such enhancement of coping resources that this change occurs? Are there other variables which promote change, such as the client's stage of change?

Clinicians work feverishly to promote health in their clients. If we were better able to understand the many factors contributing to the change process, we should then be able to better understand which factors to target. In a world that continues to demand evidenced-based and timely treatments, child psychotherapy research must begin to more accurately define those variables that make maximize change through the psychotherapy process. With this in mind, this

study attempts to shed some light on the importance of coping resources in the psychotherapeutic process.

Appendix A: Information Flier

Coping Resources and Child Therapy Outcome
Informational Flier

You and your child are invited to participate in a research study. Participation in this study is entirely voluntary. You and/or your child are free to refuse to be in the study, and your refusal will not influence current or future relationships with Austin Child Guidance Center and/or The University of Texas at Austin. You and your child may continue your therapy with your designated therapist without participating in the study.

The purpose of this study is to gather information regarding the progress of your child's therapy in order to provide better services to the families here at the agency. Your child may be among approximately 100 children included in this study.

If you decide to participate and to allow your child to participate, the research staff will provide you with various surveys to be filled out. Parents and children will be asked to complete surveys regarding child behavior as well as coping resources of both parent and child. Participants will be asked to complete the surveys as close to the first session of therapy as possible and then again at the end of ten sessions. Parents can expect the surveys to take about 30-45 minutes to complete. Children can expect to spend about 1-1 ½ hours depending on reading level on completing the surveys.

If you agree to allow your son or daughter to participate in the study that is described above, you may also be asked to take a copy of the BASC Teacher Form to your child's primary teacher and return this form to the center when the teacher has completed it. You will be asked to do this again when you and your child have completed ten therapy sessions. The BASC Teacher Form takes about 10-20 minutes to complete.

All information will be kept confidential.

Should you decide to participate in this study and allow your child to participate in this study, you and your child will be compensated for your time through items such as store gift certificates, toys, and/or folders and pencils upon the completion of the questionnaires at the end of ten therapy sessions.

If you would like to participate in this study, please sign below. By signing this form, you are indicating your consent that a research staff member may contact you for participation. Based on your information and child's age, a research staff member may then contact you for participation. You are free to refuse to participate and/or withdraw from the study at any time. You may keep this flier.

_____

Name **Date**

_____

Please Print Child's Name

Appendix B: Informed Consent

IRB# 2002-04-0099

Informed Consent to Participate in Research-

The University of Texas at Austin

You and your child are being asked to participate in a research study. This form provides you with information about the study. The Principal Investigator (the person in charge of this research) or his/her representative will also describe this study to you and answer all of your questions. Please read the information below and ask questions about anything you don't understand before deciding whether or not to take part. Your participation and your child's participation is entirely voluntary and either of you can refuse to participate without penalty or loss of benefits to which you both are otherwise entitled.

Title of Research Study: Coping Resources and Child Therapy Outcome

Principal Investigator(s) and Telephone Number(s):
Allison L. Sallee, M. A., LMFT 512-329-6706
Professor Chris McCarthy, Ph.D. 512-471-4409

Funding source: personal funds

What is the purpose of this study?

The purpose of this study is to gather information regarding the progress of your child's therapy in relation to coping resources. Coping resources are things that help us manage the daily life demands we face. They include things like family support, behavior control, confidence, and self-directedness. By understanding if coping resources affect therapeutic progress, better services may be provided to families in therapy. This may include helping families and/or children to increase their coping resources or focusing on developing specific

coping resources. You and your child will be among approximately 100 children included in this study.

What will be done if you take part in this research study?

In order to take part in this study, your child must be between the ages of 8 and 18, and he or she must be living with you. Both you and your child must be fluent in English and you must both complete the study instruments in order to be included. You must be seeking therapeutic services (as opposed to assessment services) from the center, and you must be at the beginning of the ten sessions of your therapy in order to participate.

Any information that is obtained in connection with this study and that can be identified with you or your child will remain confidential to the agency and will be disclosed only with your permission. Your child's and your responses will not be linked to your names in any written or verbal report of this research project. However, we would like to share both of your responses with your therapist. We believe that this information will aid your therapeutic progress. If you or your child would NOT like to have your responses shared with your therapist, please let your research staff member know. Both your and your child's answers will then be kept confidential.

If you decide to participate and to allow your child to participate, the research staff will provide you with various surveys to be filled out. Parents will be asked to complete the Coping Resources Inventory (CRI) and the Behavior Assessment Scales for Children-Parent Form (BASC). You will be asked to complete these two surveys prior to the first therapy session and at the end of ten therapy sessions at the center. Together the surveys take about 30-45 minutes to complete. The CRI helps to identify an adult's coping resources. It will ask you questions about how you feel about yourself and your family and/or friends as well as your physical health. The BASC is a questionnaire about behaviors that you see in your child. The BASC will ask you many questions about your child's actions, such as how he or she gets along with others, how physically active he or she is, and his or her physical health.

If you allow your child to participate, the research staff will provide your child with two surveys: the Coping Resources Inventory Scales for Educational Enhancement (CRISEE) and the Behavior Assessment Scale for Children Self-Report of Personality (BASC). Your child will be asked to complete the CRISEE and the BASC at Austin Child Guidance Center as close to the first therapy session as possible. Your child will be asked to complete the CRISEE and the BASC again when he or she has completed ten therapy sessions. The CRISEE and the BASC take about 1-1½ hours to complete. The CRISEE is designed to be used

with children. This questionnaire will ask your child about how well he or she follows directions from authority figures, how he or she feels physically, as well as how he or she gets along with others. The BASC will ask your child about how others treat him or her, how well he or she does in school, and how he or she deals with problems.

If you agree to allow your son or daughter to participate in the study that is described above, the following information will be obtained from your child's ACGC file: age, sex, ethnicity, and parental marital status as well as global scores from the BASC (Teacher Rating Scales) if your therapist has asked you to have one completed by your child's teacher. In addition, your child's pre-therapy and post-therapy Child and Adolescent Functional Assessment Scale (CAFAS) rating, completed by your therapist, will be obtained. If your child has completed educational testing, the global, full scale IQ score will be obtained. You may request that the IQ score not be used in the study. This will not affect the ability to participate. Your signature on this form indicates that you have given your son or daughter permission to participate in the study and have given the principal investigator permission to access your child's file in order to obtain the information listed. In addition, your signature also indicates your willingness to participate in this study.

What are the possible discomforts and risks?

There are no foreseeable risks associated with participation in this study. However, you and/or your child may feel some discomfort in answering personal questions. In addition, you or your child may find some of the questions repetitive. Please do the best that each of you can. Your decision to participate and to allow your child to participate will *not* affect your present or future relationship with The University of Texas at Austin or Austin Child Guidance Center. Your decision will not affect your right to receive services from Austin Child Guidance Center. If you agree to participate and allow your child to participate, you may discontinue your and his or her participation at any time.

If you or your child wish to discuss the information above or any other risks you may experience, you may ask questions now or call the Principal Investigator listed on the front page of this form. In addition, if you feel that you or your child may need additional treatment because of this study, you may contact your ACGC therapist, Anne Nelson, Ph.D. (ACGC director of research), or the principal investigator listed on the front page of this form.

What are the possible benefits to you or to others?

Any information that is obtained in connection with this study and that can be identified with you or your child will remain confidential to the agency and will be disclosed only with your permission. Your and/or your child's responses

will not be linked to your names in any written or verbal report of this research project. However, we would like to share your responses with your therapist. We believe that this information will aid your therapeutic progress by providing your therapist with valuable information. This may improve the services you and/or your child may receive her. If you or your child would NOT like to have your responses shared with your therapist, please let your research staff member know. Your answers will then be kept confidential. In addition, you will be providing this agency with valuable information that may help in improving therapeutic services to others.

If you choose to take part in this study, will it cost you anything?

No.

Will you receive compensation for your participation in this study?

Should you decide to participate in this study and allow your child to participate in this study, you and your child will be compensated for your time through items such as store gift certificates, toys, and/or folders and pencils upon the completion of the questionnaires at the end of ten therapy sessions.

What if you are injured because of the study?

No physical risks are associated with this study. Medical care and/or hospitalization for research-related injuries will not be provided free of charge nor will financial compensation be available.

If you do not want to take part in this study, what other options are available to you?

Participation in this study is entirely voluntary. You and/or your child are free to refuse to be in the study, and your refusal will not influence current or future relationships with The University of Texas at Austin and/or Austin Child Guidance Center. You and your child may continue your therapy with your designated therapist without participating in the study.

How can you withdraw from this research study?

If you wish to stop your participation or your child's participation in this research study for any reason, you should contact: Allison Sallee at (512) 329-6706. You are free to withdraw your consent and stop participation in this research study at any time without penalty or loss of benefits for which

you may be entitled. Throughout the study, the researchers will notify you of new information that may become available and that might affect your decision to remain in the study.

In addition, if you have questions about your rights as a research participant, please contact Clarke A. Burnham, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects, 512/232-4383.

How will your privacy and the confidentiality of your research records be protected?

Authorized persons from The University of Texas at Austin and the Institutional Review Board have the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law. If the research project is sponsored then the sponsor also have the legal right to review your research records. Otherwise, your research records will not be released without your consent unless required by law or a court order.

If the results of this research are published or presented at scientific meetings, your identity will not be disclosed.

Will the researchers benefit from your participation in this study?

Yes. The researchers will gain additional knowledge in understanding the relationship between coping resources and the outcome of your child's therapy.

Signatures:

As a representative of this study, I have explained the purpose, the procedures, the benefits, and the risks that are involved in this research study:

_____ _____

Signature and printed name of person obtaining consent **Date**

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

_____ _____

Printed Name of Subject **Date**

_____ _____

Signature of Subject **Date**

If your child is between the ages of 13 and 17, he or she may also sign below. If your child is between the ages of 7 and 12, please see the enclosed Assent Form for him or her to sign.

I have read the description of the study titled Coping Resources and Child Therapy Outcome that is printed above, and I understand what the procedures are and what will happen to me in the study. I have received permission from my parent(s) to participate in the study, and I agree to participate in it. I know that I can quit the study at any time.

_____ _____

Signature of Minor **Date**

_____ _____

Signature of Principal Investigator

Date

Appendix C: Assent Form

ASSENT FORM

Coping Resources and Child Therapy Outcome

I agree to be in a study about coping resources and therapy. This study was explained to my (mother/father/parents/guardian) and (she/he/they) said that I could be in it. The only people who will know about what I say and do in the study will be the people in charge of the study and my therapist. If I do not want my therapist to know about my answers on the CRISEE or BASC, I can tell the person who gave me this paper, and my answers will only go to the people in charge of the study. I understand that one of the researchers will take these things from my file at ACGC: age, sex, ethnicity, and whether or not my parents are married. They will also use only the general scores from the BASC and/or the WASI or WISC if this information is available.

In the study, I will be asked questions about how I feel and what I do at school and at home. I will also be asked questions about breaking rules and how I get along with other people. I will be asked questions about how well I do at school and if I understand what my parents or teachers want me to do.

Writing my name on this page means that the page was read (by me/to me) and that I agree to be in the study. I know what will happen to me. If I decide to quit the study, all I have to do is tell the person in charge.

_____ _____

Child's Signature Date

_____ _____

Signature of Researcher Date

Appendix D: Paraphrased Items from the CRISEE

Coping Resources Inventory Scales for Educational Enhancement

Paraphrased Items

(adapted from McCarthy, Seraphine, Matheny & Curlette, 2000)

No.	Item
	Behavior Control Scale
19.	get into fights
68.	get into much trouble
49.	talk back to teachers
38.	frequently break rules
74.	pick on students
45.	lose control when upset
63.	throw things when angry
4.	misbehave in school
11.	sometimes hit someone
40.	have temper tantrums
58.	yell at people when angry
22.	frequently get angry
13.	frequently tell lies
66.	not easy to make friends

Social Confidence Subscale

37. trouble talking about feelings
31. bothers to tell feelings
10. afraid to tell people what I think
12. hide my true feelings
24. afraid I will say the wrong thing
46. afraid to ask for what I want
76. keep thoughts to myself
28. worry people will be angry
78. frequently feel nervous
50. afraid to try new things
21. am shy
35. want family to love me more
64. stay nervous at school
60. want my family to help me more
6. keep my feelings to myself
52. afraid I will fail this grade
56. do anything for people to like me

Academic Confidence Subscale

48. class work is done on time
34. turn in school work when due
36. get things finished on time
30. get work done before others
44. do school work very well
8. smarter than most students
72. know answer in class
26. plan my work well
79. get good grades on homework
73. do homework
55. do the work I am told to do
14. use time better than most
17. do what my teachers expect
20. not as smart as most students
47. correct my mistakes
67. I watch TV or play
1. very good student
38. good student
39. cannot keep mind on work

Family Support Subscale

16. do fun things with my parents
2. belong in my family
18. spend time with parents
57. parents listen when worried
71. talk to parents about problems
23. can talk to my family
33. parents help with homework
3. parents praise for doing well
69. try hard to please my parents
27. feel very safe at home
42. problems at home
5. do what my parents expect
53. parent(s) read to me

Peer Acceptance Subscale

59 liked by most students at school
15 students like to talk to me
9 students like the way I look
80 get along well with other people
51 people think I look good
41 other students treat me fairly

70 students make fun of me

77 liked by popular students

61 hard to make friends

7 classmates are good to me

29 students tease me about looks

43 do not have many friends

54. wanted more friends at school

(Experimental) Responsibility Subscale

32. try to do what teachers want

75. try to avoid doing work at home

81. try to get work done

External Stressors Scale

82. classroom is too crowded

83. frequently lose at games/ sports

84. students take things from me

85. much fighting in my school

86. students try to hurt me

87. much crime in my neighborhood

88. moved during the last year

89. frequently picked last on a team

90. left alone a lot

91. live with mother and father
92. people frequently hit me
93. people often yell at me
94. much fighting in neighborhood
95. students tease me
96. have scary dreams
97. was held back a grade
98. sent to the principal a lot
99. frequently get lost

Validity Check Items

62. more than five years old
65. passed the first grade

Appendix E: Sample Items from the CRI

Coping Resources Inventory

For each of the sixty statements that follow, fill in the circle on your answer sheet that best describes you in the last six months. For each statement mark on of the following descriptions:

Never or rarely

Sometimes

Often

Always or almost always

1. I have plenty of energy.
2. I say what I need or want without making excuses or dropping hints.
3. I like myself.
4. I am comfortable with the number of friends I have.
5. I eat junk food.
6. I fell as worthwhile as anyone else.
7. I am happy.
8. I am comfortable talking to strangers.
9. I am part of a group, other than my family, that cares about me.
10. I accept the mysteries of life and death.
11. I see myself as lovable.
12. I actively look for the positive side of people and situations.

Appendix F: Sample Items from the BASC SRP-C

Behavior Assessment Scale for Children Self-Report Child

1. I think I am very creative.	T	F
2. School has too many rules.	T	F
3. People expect too much from me.	T	F
4. I need help to get along with others.	T	F
5. I often have nightmares.	T	F
6. My parents are often proud of me.	T	F
7. I hear things that others cannot hear.	T	F
8. Life is getting worse and worse.	T	F
9. My teacher gets mad at me for nothing.	T	F
10. I quit easily.	T	F
11. I wish I were someone else.	T	F
12. Other people always find things wrong with me.	T	F

Appendix G: Sample Item from the BASC SRP-A

Behavior Assessment Scale for Children Self-Report—Adolescent

1. I am good at making new friends.	T	F
2. I can’t seem to control what happens to me.	T	F
3. I don’t like thinking about school.	T	F
4. I like who I am.	T	F
5. I am afraid of a lot of things.	T	F
6. I like to argue.	T	F
7. I don’t seem to do anything right.	T	F
8. People act as if they don’t hear me.	T	F
9. I always go to bed on time.	T	F
10. I am an important person in my family.	T	F
11. Someone wants to hurt me.	T	F
12. Teachers are neat people.	T	F

Appendix H: Sample Items from the BASC PRS-C

Behavior Assessment Scale for Children Parent Report—Child

Circle N if the behavior **never** occurs.

Circle S if the behavior **sometimes** occurs.

Circle O if the behavior **often** occurs.

Circle A if the behavior **almost always** occurs.

1. Adjusts well to new teachers.	N	S	O	A
2. Threatens to hurt others.	N	S	O	A
3. Worries.	N	S	O	A
4. Listens to directions.	N	S	O	A
5. Rocks back and forth for long periods of time	N	S	O	A
6. Runs away from home.	N	S	O	A
7. Says, “I don’t have any friends.”	N	S	O	A
8. Cannot wait to take turn.	N	S	O	A
9. Attends after-school activities.	N	S	O	A
10. Says, “please” and “thank you”.	N	S	O	A
11. Complains of shortness of breath.	N	S	O	A
12. Readily starts up conversations with new people.	N	S	O	A

Appendix J: Sample Items from the BASC PRS-A

Behavior Assessment Scale for Children Parent Rating Scales-Adolescent

Circle N if the behavior **never** occurs.

Circle S if the behavior **sometimes** occurs.

Circle O if the behavior **often** occurs.

Circle A if the behavior **almost always** occurs.

1. Compliments others.	N	S	O	A
2. Bullies others.	N	S	O	A
3. Has trouble getting to sleep.	N	S	O	A
4. Forgets things.	N	S	O	A
5. See things that are not there.	N	S	O	A
6. Is in trouble with the police.	N	S	O	A
7. Says, “I want to kill myself.”	N	S	O	A
8. Needs too much supervision.	N	S	O	A
9. Is creative.	N	S	O	A
10. Complains of shortness of breath.	N	S	O	A
11. Avoids competing with other adolescents.	N	S	O	A
12. Begins conversations appropriately.	N	S	O	A

Appendix K: Sample Items from the CAFAS

Child and Adolescent Functional Assessment Scale

Home Subscale: Role Performance

Severe Impairment: *Severe disruption or incapacitation* (30)

041 Not in the home due to behavior that occurred in the home during the rating period (if youth were in the home, extensive management by others would be required in order for youth to be maintained in the home).

042 Extensive management by others required in order to be maintained in the home.

043 Deliberate and serious threats of physical harm to household members.

044 Repeated acts of intimidation toward household members.

045 Behavior and activities are beyond caregiver's influence almost all of the time (i.e., serious and repeated violations of expectations and rules, such as curfew).

046 Behavior and activities have to be constantly monitored in order to ensure safety in the home.

047 Supervision of youth required which does or would interfere with caregiver's ability to work or carry out other roles.

048 Run away from home overnight more than once, or once for an extended time, and whereabouts unknown to caregiver.

049 deliberate and severe damage to property in the home (e.g., home structure, grounds, furnishings).

Moderate Impairment: ***Major or persistent disruption*** **(20)**

051 Persistent failure to comply with reasonable rules and expectations within the home (e.g., bedtime, curfew); active defiance much of the time (OR if youth is not in home, youth fails to comply with rules and expectations unless close monitoring/supervision is maintained).

052 Frequent use of profane, vulgar, or curse words to household members.

053 Repeated irresponsible behavior in the home is potentially dangerous (e.g., leaves stove on).

054 Run away from home overnight and likely whereabouts are known to caregivers, such as a friend's home.

055 Deliberate damage to the home.

Mild Impairment: ***Significant problems or distress*** **(10)**

057 Frequently fails to comply with reasonable rules and expectations within the home.

058 Has to be "watched" or prodded in order to get him/her to do chores or comply with requests.

059 Frequently "balks" or resists routines, chores, or following instructions, but will comply if caregiver insists.

060 Frequently engages in behaviors which are intentionally frustrating or annoying to caregiver (e.g., taunting siblings, purposeful dawdling).

Minimal Impairment: ***No disruption of functioning*** **(0)**

062 Typically complies with reasonable rules and expectations within the home.

063 Minor problems satisfactorily resolved.

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